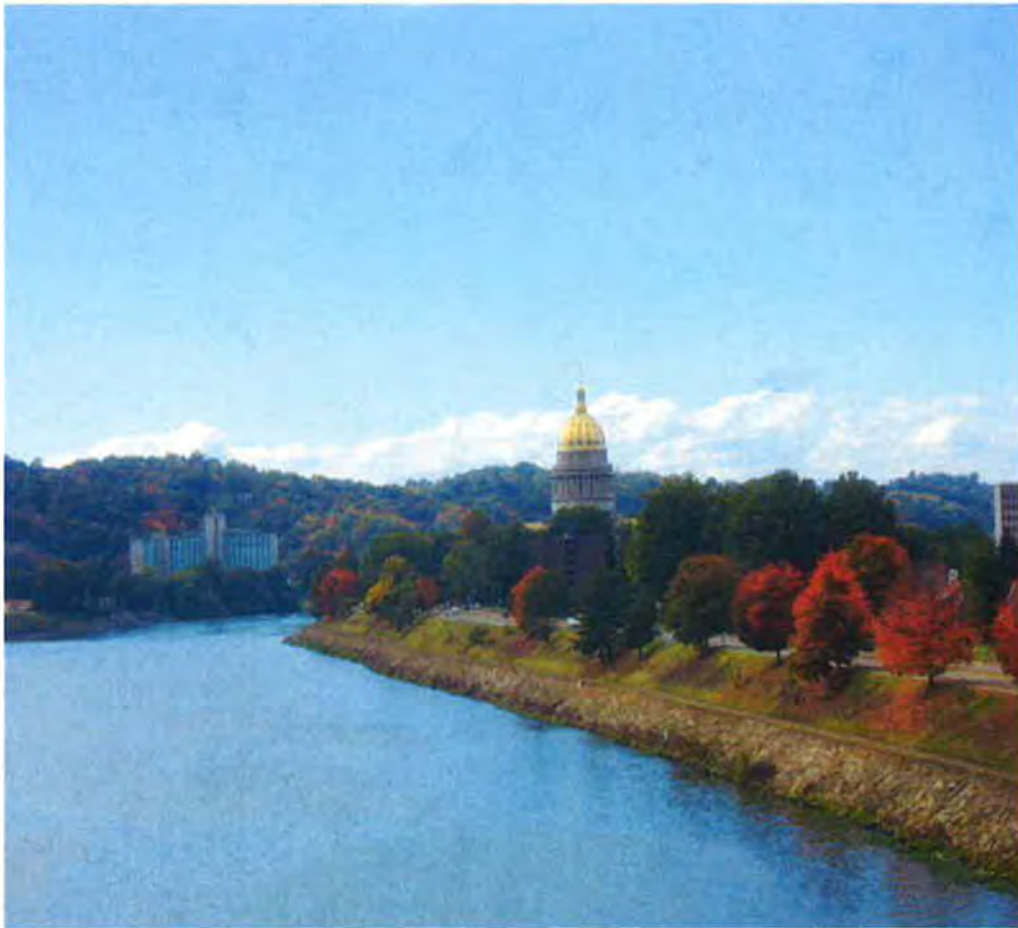




WV JOBS INVESTMENT TRUST BOARD  
ANNUAL INVESTMENT ANALYSES  
JUNE 30, 2015



West Virginia Jobs Investment Trust  
1012 Kanawha Blvd. East, 5th Floor  
Charleston, WV 25301  
Tel: 304-345-6200  
Fax: 304-345-6262  
[www.wvjit.org](http://www.wvjit.org)



## Message from WVJIT Executive Director

To our WVJIT Board of Directors and State Legislators:

Since our inception in 1992, the WVJIT has played an instrumental role in our state's economic development. WVJIT was created to develop, promote and expand our state's economy by direct investment in West Virginia's enterprises to create jobs, sustain growth, and provide new opportunities. Our investments touch major sectors within this state's economy such as manufacturing and energy, yet we have also been able to invest in emerging sectors that will play a role for our state's future growth such as healthcare, biotechnology, software, and engineering.

As of 2015, WVJIT has invested a little over \$11 million dollars across 21 companies in a broad array of sectors. Total equity investment and loans provided are \$6.3 million dollars and \$4.7 million dollars, respectively. A total of 514 full-time equivalent jobs have been created, which equates to \$21,276 of WVJIT investment for each full-time equivalent job created. This is less compared to a study, which reflected that for every \$30,668 of private venture capital invested between 1970 through 2005, there was one job in the year 2010. Though the national government provides subsidies, which are a direct cost to the taxpayer, directly to corporations with the intention of creating demand for workers for low salary jobs, venture capital investment not only provided a substantial monetary return, but also sustainable high salary grade job creation.

In January 2012, the State of West Virginia received the State Small Business Credit Initiative (SSBCI) funding to give the state's small businesses access to new capital. This new funding has given West Virginia enterprises access to \$13.1 million dollars, all of which is administered through the West Virginia Capital Access Program (WVCAP). We have had the pleasure to partner up with many of our fellow state economic developers, to provide capital to small enterprises across West Virginia and create jobs. To date, the WVCAP has had success in attaining the objective of having retained 444 jobs and create 584 projected new jobs. WVCAP has been so successful that it is currently the 2<sup>nd</sup> highest achieving SSBCI initiative program in the nation and achieved a clean audit from the Office of Inspector General.

While we are aware of the challenges that lay ahead, I could not be more proud of our accomplishments this past year and could not be more optimistic for our state's economic future. On behalf of the WVJIT staff, I thank you for your assistance and continuous support in us to fulfill our economic and entrepreneurial mission to this great state.

Yours Truly,

A handwritten signature in blue ink, appearing to read "C. Andrew Zulauf".

C. Andrew Zulauf

---



**TABLE OF CONTENTS**

<b>Aither Chemicals, LLC.....</b>	<b>1</b>
<b>American Benefit Corporation.....</b>	<b>2</b>
<b>ABC Holding Company.....</b>	<b>3</b>
<b>Berkeley Springs Instruments, LLC.....</b>	<b>4</b>
<b>CampaignR, LLC.....</b>	<b>5</b>
<b>Crosscutting Concepts, LLC.....</b>	<b>6</b>
<b>Dynamic Physical Therapy, LLC.....</b>	<b>7</b>
<b>Greenbrier Technical Services, Inc.....</b>	<b>8</b>
<b>Liberty Hydro, Inc.....</b>	<b>9</b>
<b>MATRIC, Inc.....</b>	<b>10</b>
<b>Mighty Tykes, LLC.....</b>	<b>11</b>
<b>Mountaineer Trout Farm, LLC.....</b>	<b>12</b>
<b>PolyPlexx, LLC.....</b>	<b>13</b>
<b>Protea Biosciences, Inc.....</b>	<b>14</b>
<b>Spectrum Radio Group, LLC .....</b>	<b>15</b>
<b>Troy, LLC .....</b>	<b>16</b>
<b>US Glass, Inc.....</b>	<b>17</b>
<b>Vandalia Research, Inc.....</b>	<b>18</b>
<b>Vested Health, Inc.....</b>	<b>19</b>
<b>WV Potato Chip, LLC.....</b>	<b>20</b>
<b>WV Therapy Services, LLC.....</b>	<b>21</b>

---

## Methodology of Current Evaluation of the Investment

Factors that may be considered in the evaluation of investments in equity and debt securities of startup companies and other securities for which market quotations are not readily available are:

- the amount that might reasonably be expected to be received upon current sale of the securities;
- the fundamental analytical data relating to the investment;
- the nature and duration of restrictions on disposition of the securities;
- an evaluation of the forces that influence the market in which these securities are purchased and sold;
- type of security;
- cost at date of purchase;
- size of holding;
- discount from market value of unrestricted securities of the same class at the time of purchase;
- financial statements;
- special reports prepared by analysts;
- information as to any transactions or offers with respect to the security;
- existence of merger proposals or tender offers affecting the securities;
- price and extent of public trading in similar securities of the issuer or comparable companies;
- the nature of the business and history of the enterprise from its inception;
- the general economic outlook and the condition of and outlook for the specific industry;
- an evaluation of the securities and economic condition of the portfolio company;
- the portfolio company's capacity for earnings;
- the portfolio company's market position;
- competition;
- the portfolio company's goodwill and other intangible values;
- recent sales of securities by the portfolio company;
- market prices of publicly traded securities of corporations of comparable size and earnings in the, or similar lines of, business;
- likelihood of exercise of conversion privileges of convertible securities;
- actual performance compared to expected performance; and
- other relevant matters.

The American Institute of Certified Public Accountants (AICPA) *Audit and Accounting Guide, Audits of Investment Companies*, requires venture capital companies to record their investment portfolios at quoted market prices or, in the absence of quoted prices, at amounts representing estimates of fair value using methods determined in good faith by the board of directors or general partner.

Financial Accounting Standards Board (FASB) Statement No. 114, *Accounting by Creditors for Impairment of a Loan*, excludes all companies that record investments at fair value, in accordance with specialized practice, from the requirements to report loan loss contingencies. In any event, the FASB requires that loan loss provisions be



accrued only when it is *probable* that an asset has been impaired and that the amount of the loss be *reasonably* estimable.

The AICPA Investment Companies Special Committee states in its report, *Accounting for Venture Capital Investment Companies*, that "Startup companies generally do not have a record of earnings or operating information. Startup and other early-stage companies generally report losses in the early years, and portfolio companies seeking second-stage financing may not yet be showing profits. An operating loss reported by a portfolio company does not necessarily mean that the venture capital investment company should reduce the carrying amount of its investment. In determining value, the board of directors should also consider such factors as the cost of the investment, actual performance compared to expected performance, and earning potential."

The Investment Companies Special Committee believes that investments in startup companies should be presented at value. Value is usually assumed to be the same as cost during the early stages of such investments unless there is persuasive evidence of a quantifiable increase or decrease in the value of the investment based on consideration of such factors as those discussed above.



**Snapshot:**

Company: **Aither Chemicals, LLC**  
Website: aitherchem.com  
Location: South Charleston, WV  
Total Employees: FT/0; PT/0  
WV Employees: FT/0; PT/0

**WVJIT Investment: \$0**  
**WVJIT Ownership: 17.50%**  
**Subject to GASB62: NO**

**Background**

The genesis of Aither Chemicals began in 2010 as an effort by the Mid-Atlantic Technology, Research & Innovation Center (MATRIC) to evaluate the utilization of unique, demonstrated technologies to create value added chemicals from ethane. Throughout 2010, MATRIC's team of highly experienced technical and management staff worked to evaluate the opportunity created by tremendous supplies of ethane coming from the wet natural gas in shale plays. As a result of this valuation and additional technical work, Aither was officially formed in 2010 by MATRIC.

Aither Chemicals technology is based upon a proven, proprietary, patent-pending chemical process that converts a natural gas feedstock (ethane) into higher value chemical products (petrochemicals) in a cost effective manner. Aither's manufacturing process is the lowest cost production method to make petrochemicals. Using Aither's proprietary process, their facilities have advantages over traditional ethane cracking technologies.

**WVJIT Investment History**

- **July 2011:**
  - \$250,000 Convertible Debenture; 10% Interest; Maturity Date of June 26, 2014.
  - Loan put on non-accrual, 100% reserved against outstanding principal.
- **June 2012:**
  - \$300,000 Convertible Debenture; 10% Interest; Maturity date of June 26 2014.
- **December 2014:**
  - MAH granted 1,756,325 shares to WVJIT – resulting in 17.56% ownership

**WVJIT FY2015 Revenue: \$0**

**Total WVJIT Investment: \$550,000 (\$300,000 funded through WVCAP)**



**Warrant Coverage:**

- **July 2011:** 200% Warrant Coverage into Preferred A Units, 7 year term, strike price at the initial Series A Preferred Price.
- **June 2012:** 100% warrant coverage into Preferred A Units, 7 year term, strike price at a 20% discount of the Series A Preferred price.

**Co-Investors/Lenders:**

INNOVA  
RMG  
MAH

**Board of Directors**

**Steven Adelkoff, MBA/J.D., Renewable Manufacturing Gateway**

For over two decades, Steven Adelkoff has worked in all aspects of the power, alternative energy and commodities industries. He has led teams negotiating domestic and international transactions involving commodities, power generation development, renewable energy development, and commodity exploration. Mr. Adelkoff's diverse skill set includes expertise in the legal, regulatory, tax and accounting fields. He earned an MBA from Cornell University's Johnson School of Business and a J.D. from the University of Pittsburgh's School of Law. He is currently the President of Renewable Manufacturing Gateway ([www.renewmfg.org](http://www.renewmfg.org)) and an equity owner of International Electric Power, LLC ([www.iepwr.com](http://www.iepwr.com)). Prior to holding those roles, Mr. Adelkoff was the Chief Financial Officer and General Counsel of Shariah Capital, Inc. ([www.shariahcap.com](http://www.shariahcap.com)) and an equity partner of K&L Gates, LLP ([www.klgates.com](http://www.klgates.com)).

**Patrick Bond, Mountaineer Capital**

Managing Director of McCabe-Henley Properties LP since 1998, Pat Bond brings a wealth of experience in finance, administration, strategic planning, general management and management information systems. Previously, Mr. Bond owned/operated an independent consulting practice, Growth Management Group that specialized in the areas of Business Environment Assessments, new product development, investment and financial analysis and strategic planning. Prior to that, he was President of a natural gas marketing company and was President and CEO of Atlantic Financial Federal, a \$750 million savings and loan institution and all its business units. He graduated from WVU where he received both Master's and Bachelor's Degrees in Industrial Engineering.

**C. Andrew Zulauf, Executive Director, WV Jobs Investment Trust**

Andy Zulauf has extensive experience in finance and venture capital, having served as Executive Director and Senior Loan Officer for the West Virginia Capital Corporation, as a Partner and Managing Director of West Virginia operations for Adena Ventures, and as Vice President and Upper Middle Market Commercial Relationship Officer for Fifth Third Bank. Mr. Zulauf is a graduate of Marshall University and the University of Charleston's Executive MBA program.

**Guy Peduto, INNOVA Commercialization Group**

Guy Peduto joined the INNOVA Commercialization Group in April 2006. Prior to joining INNOVA, he held the position of Director of Commercial Programs at the Institute for Scientific Research, Inc. While there, he developed

---



strategies for the commercial utilization of ISR's technology and research applications in such areas as biomedical research, education, software development, mining safety and communication, VTOL aerial vehicles, and automotive controls and diagnostics.

Mr. Peduto's background includes 20 years of strategic planning experience with an emphasis on product introduction, leadership for early stage and start-up companies as well as market and business development. This experience includes business formation, product development, go-to-market and market development strategies for industrial and commercial manufacturers, consumer goods, advanced research and development, healthcare, financial institutions, Internet start-ups and retail chains.

As a participant and contributor to West Virginia's technology-based economic development movement, he serves on the Board of Directors of TechConnect and executive committee of TechConnect WV, as a member of the WV Angel Network working group, the West Virginia Development Office and the West Virginia Small Business Development Center's Advisory Board of Directors, the I-79 Development Council and West Virginia Biometrics Initiative.

Mr. Peduto received a Bachelor's degree in Business Administration with a major in Marketing from West Virginia University. In addition, he is a graduate of the Competitive Strategy program at the Kellogg School, Northwestern University, the Commercialization and Technology Transfer program at Carnegie Mellon University, the National Association of Seed and Venture Funds Professional Development Program and the Venture Capital Institute. He is also a member of the Leadership West Virginia Class of 2004.

**John Meisner, MATRIC Representative**

Mr. Meisner serves as General Counsel and Corporate Secretary for MATRIC.

**Products**

Aither Chemicals technology is based upon a proven, proprietary, patent-pending chemical process that converts a natural gas feedstock (ethane) into higher value chemical products (petrochemicals) in a cost effective manner. Aither's manufacturing process is the lowest cost production method to make petrochemicals. Using Aither's proprietary process, their facilities will have the following advantages over traditional ethane cracking technologies:

- Lower capital cost
- Lower operating cost
- Shorter time to commercial operations
- Lower energy input
- Lower CO2 output
- Smaller plant footprint
- Simpler process to product higher-value products

**Market/Industry Summary**

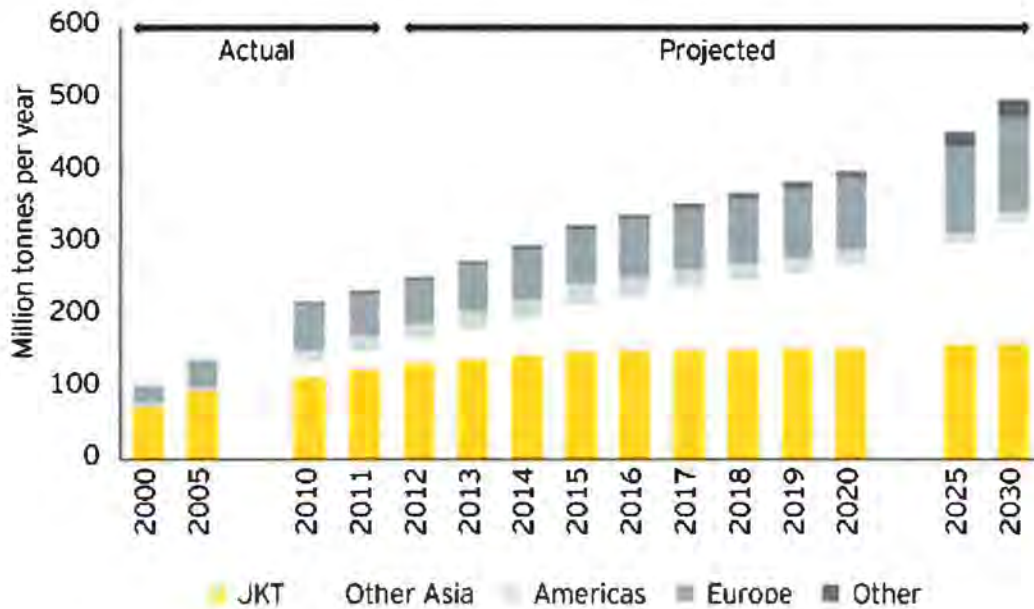
Total global natural gas demand is estimated to have grown by about 2.7% per year since 2000; however, global LNG demand has risen by an estimated 7.6% per year over the same period, almost three times faster.

---



Global gas demand is expected to continue to grow strongly. In its most recent annual World Energy Outlook, the International Energy Agency (IEA) forecast a growing role for natural gas in the world's energy mix, with the natural gas share growing from 21% in 2010 to 25% in 2035, with natural gas as the only fossil fuel whose share was growing.

LNG demand growth is, however, expected to be even stronger, particularly through 2020. After 2020, demand growth is expected to continue, albeit at a slightly slower pace as markets mature, demand shifts to more price-sensitive buyers, and some price subsidies are removed in non-OECD markets.



Source: EY assessments of data from multiple sources

Global LNG demand by 2030 could, however, be almost double that of the estimated 2012 level of about 250 million metric tonnes. Japan, South Korea and Taiwan (collectively, JKT) have been and are expected to remain the backbone of the global LNG market, while China and India are expected to be the biggest sources of additional LNG demand.

### WV Cracker Project

There was another strong indication the Brazilian companies considering building an ethane cracker plant near Parkersburg in Wood County are going to take their time making a final decision and could decide not to build the cracker at all.

The Pittsburgh Business Times reported in April 2015 when Braskem and Odebrecht issued a joint-statement saying they are “re-evaluating” plans to build the cracker. The doubt has been created by lower oil prices that officials have described as lessening the advantage that would be gained by using ethane from the Marcellus shale.

The West Virginia project still has its advantages according to Braskem America CEO, Fernando Musa. The Pittsburgh Business Times report said Musa told Chemical Week the compelling case for the Wood County plant is it would be close to the majority of the market for the product the ethane cracker would produce. Both Governor

Earl Ray Tomblin and state Commerce Secretary Keith Burdette both said in February there was no reason to doubt the project. Company officials said if the plant happens it won't be until 2020.

### **Significant Events**

**May 2015:** MATRIC COO, Greg Clutter, resigns from Aither Board. John Miesner is the temporary replacement on the board.

**January 2015:** MAH holdings received a request from INNOVA and WVJIT for information pertaining to the due diligence process for the evaluation conducted by a new investor.

**December 2014:** MAH granted 1,756,325 shares to WVJIT. The shares represent 17.56% ownership in Aither.

**September 2014:** RMG has offered to divest its stake in Aither to WVJIT; Negotiations continue between RMG and WVJIT.

**June 2014:** Aither Board of directors submitted a draft agreement to a regional energy holding company for a potential investment into the Company.

**March 2014:** Company had a meeting with a Taiwanese Petrochemical Company looking to negotiate a joint venture/M&A for rights to the catalyst for their cracker plant.

**October 2013:** A mutual confidentiality agreement was signed by a regional energy holding company and the Aither Board of Directors and Management team for a potential interest in the Company.

**September 2013:** WVJIT recommended to its board of directors to reserve 100% of the outstanding principal balance on the existing debentures (\$250,000 and \$300,000) and put the loan on non-accrual. The recommendation was approved.

**August 2013:** MATRIC and Aither put together a plan on a small production plant located at the technology park. The budget for the project is \$2.5M; \$1.56M for the commercial tube, \$350K for the catalyst, \$210K for IP, and another \$200+ in soft costs. WVJIT prepared a \$2.5M term sheet for the Company under the condition that the first domestic plant is built in WV.

**May 2013:** Company submitted a grant application to Tech Connect WV in partnership with the Chemical Alliance Zone for a preliminary study for a potential small scale plant in the Kanawha Valley.

**July 2012:** A late July press release from Aither indicates they have been very "pleased" with the responses they have received about the products their catalytic ethane cracking technology can deliver. These responses include technology licensors, engineering procurement and construction (EPCs) companies, as well as organizations looking to relocate to the Kanawha Valley.

**January 2012:** Aither closed on a financing transaction with Renewable Manufacturing Gateway (RMG).

### **Overall Conclusion**

Based on the foregoing, the WV Jobs Investment Trust finds it most appropriate to record its investment in Aither Chemicals, LLC at value, which is currently presumed to be \$0, due to a one-hundred percent reserve against the loan.

---





**Snapshot:**

Company: American Benefit Corp.  
Website: abcwv.com  
Location: Ona, WV  
Total Employees: FT/58; PT/1  
WV Employees: FT/58; PT/1

**WVJIT Investment: \$699,650**  
**WVJIT Ownership: 12.47%**  
**Subject to GASB62: NO**

**Leadership**

C. Ryan Jones,	Chief Executive Officer
John Galloway	Chief Financial Officer
Jim Kirk	Chief Information Officer
Kimberly A. Wood	Chief Administration Officer

**Background**

American Benefit Corporation has been in existence for over 60 years having been formed in 1948 as the Raymond Hage Company and was renamed American Benefit Corporation (ABC) in 1976. It specializes in managing plans for hard-working Americans and provides best-in-class service to teamsters, plumbers, pipe fitters, steel workers, carpenters, electrical workers, operating engineers, miners, laborers and many others. Following a succession of owner-operators, the Company was purchased by Charles W. (Bill) Eastwood, Jr. in 2007. ABC is the only third party administrator (TPA) in West Virginia that handles Taft Hartley plans. Its principal offices are located in Ona, WV.

ABC has developed relationships that provide competitive advantages, specifically being able to offer discounts on medical procedures through a relationship with Anthem Blue Cross and Blue Shield. The Company has also established additional advantages such as state of the art information management, wellness program offerings, and consumer-driven healthcare.

**WVJIT Investment History**

- **December 2009:**
  - \$699,650 Series A Preferred Unit Investment
  - 8% Cumulative Monthly Dividend
  - 825 Shares
  - Warrants (See below)

**WV JOBS INVESTMENT TRUST BOARD  
ANNUAL INVESTMENT ANALYSES  
JUNE 30, 2015**

<u>Company</u>	<u>Date Iss.</u>	<u>Equity Inv.</u>	<u>Debt Inv.</u>	<u>Coverage (%)</u>	<u>Type</u>	<u>Term (Yrs)</u>	<u>Exp. Date</u>	<u># Warrants</u>	<u>Cost to Exercise</u>
ABC	Feb -10	\$700K	-	10%	Pref. A	7	Feb - 17	70K	\$63K
ABC	Aug- 11	-	\$100K	10%	Pref. A	7	Aug - 18	10K	\$9K

**Dividends Received FY2015: \$55,971.66**

**Co-Investors/Lenders**

Fifth Third Bank

**Management Team**

**Charles W. Eastwood, Board of Directors Chairman**

With more than 25 years of experience in the sales and service of employee benefit programs, Charles Eastwood was appointed as American Benefit Corporation's CEO in 2007. Over his considerable career, he has performed a variety of roles at such notable companies as Prudential and John Hancock Insurance. Mr. Eastwood served 13 years with Blue Cross and Blue Shield of West Virginia prior to becoming a National Account Executive with Cigna. While at Cigna, Mr. Eastwood and his sales team received the Superior Achievement Award for delivering the highest level of sales and service to their client base. After a 10 year stint with Cigna, Mr. Eastwood took the knowledge and expertise he had gained and opened Eastwood Consulting. Mr. Eastwood holds a Bachelor's degree in Political Theory and Philosophy from West Virginia State University.

**C. Ryan Jones, Chief Executive Officer**

Ryan Jones joined American Benefit Corporation in 2007. Mr. Jones is a CPA who has an extensive background in public practice including a regional firm that concentrated its practice in the healthcare field. Mr. Jones works closely with the IT and Sales departments to achieve the financial goals of the organization. Mr. Jones holds a Bachelor's degree in Business Administration with a concentration in Accounting from West Virginia State University.

**Jim Kirk, Chief Information Officer**

Mr. Kirk joined American Benefit in 2008, after spending 20 years with Dow Chemical Company as their International Infrastructure Architect. Mr. Kirk is responsible for the design and implementation of information systems and operations.

Mr. Kirk earned his Associate's degree in Chemical Technology from West Virginia State University in 1990 and his Bachelor of Science in Business Information Systems from Bellevue University in 1999. Mr. Kirk also holds a MCSE and numerous other certifications.

**Kimberly A. Wood, Chief Operations Officer**

Ms. Wood joined American Benefit Corporation in 1998 as Assistant Actuary, and was named Director of the Actuarial Department in 2005. She now serves the company as an actuary and consultant. She has extensive



experience in working with both health and pension funds, including administration, plan design, benefit studies, and federal compliance.

Ms. Wood's holds a Bachelor of Arts and Master of Arts degrees in Mathematics from Marshall University. She earned the designation of Enrolled Actuary in 2009.

**John D. Galloway, Chief Financial Officer**

Mr. Galloway joined American Benefit Corporation in 2012, bringing over 17 years of experience in public accounting. Mr. Galloway is a Certified Public Accountant licensed in West Virginia. Mr. Galloway is responsible for coordinating accounting and finance functions as well as identifying opportunities to improve financial and operational systems through internal control evaluations.

Prior to joining American Benefit Corporation, Mr. Galloway served as a Partner at Gibbons & Kawash, A.C. He gained extensive experience addressing complex financial reporting, accounting, internal control, and auditing matters for closely-held businesses, governmental entities, nonprofit organizations, and employee benefit plans.

Mr. Galloway holds a Bachelor's degree in Business Administration from the University of Charleston. Mr. Galloway is a member of the American Institute of Certified Public Accountants and the West Virginia Society of Certified Public Accounts. Additionally, he is a graduate of the 2011 class of Leadership West Virginia Program in conjunction with the West Virginia Chamber of Commerce.

**Board of Directors**

**Charles W. Eastwood, Board of Directors Chairman**

With more than 25 years of experience in the sales and service of employee benefit programs, Charles Eastwood was appointed as American Benefit Corporation's CEO in 2007. Over his considerable career, he has performed a variety of roles at such notable companies as Prudential and John Hancock Insurance. Mr. Eastwood served 13 years with Blue Cross and Blue Shield of West Virginia prior to becoming a National Account Executive with Cigna. While at Cigna, Mr. Eastwood and his sales team received the Superior Achievement Award for delivering the highest level of sales and service to their client base. After a 10 year stint with Cigna, Mr. Eastwood took the knowledge and expertise he had gained and opened Eastwood Consulting. Mr. Eastwood holds a Bachelor's degree in Political Theory and Philosophy from West Virginia State University.

**C. Ryan Jones, Chief Executive Officer**

Ryan Jones joined American Benefit Corporation in 2007. Mr. Jones is a CPA who has an extensive background in public practice including a regional firm that concentrated its practice in the healthcare field. Mr. Jones works closely with the IT and Sales departments to achieve the financial goals of the organization. Mr. Jones holds a Bachelor's degree in Business Administration with a concentration in Accounting from West Virginia State University.

**C. Andrew Zulauf, Executive Director, West Virginia Jobs Investment Trust**

Andy Zulauf has extensive experience in finance and venture capital, having served as Executive Director and Senior Loan Officer for the West Virginia Capital Corporation, as a Partner and Managing Director of West Virginia operations for Adena Ventures, and as Vice President and Upper Middle Market Commercial Relationship

---



Officer for Fifth Third Bank. Mr. Zulauf is a graduate of Marshall University and the University of Charleston's Executive MBA program.

### Products

American Benefit Corporation provides intelligent planning and management on employee health plans. The company also provides administrative support to ensure efficiency in the life of the benefit plan. Other services include:

- Benefit plan design assistance
- Medical, dental and vision claim processing and adjudication
- Pharmacy Benefits Manager evaluation, implementation and integration
- COBRA/HIPAA administration
- Consumer Directed Health Plans
  - FSA
  - HRA
  - HAS
  - VEBA
  
- Comprehensive care management suite of services
- Network analysis and optimization
- Claims re-pricing
- Disability/loss of time processing
- Coordination of benefits, including Medicare Part D
- Claim Subrogation



Over the past year, the Company has not introduced any new products or services into the market.

### Competition/Market Summary

#### *Benefit Assistance Corporation (BAC)*

Established in 1992 in Hurricane, WV, BAC has become one of the largest independent regional TPAs servicing the eastern United States. Their client base ranges from 50 to 3,000 employees and the Company prides itself for not being tied to the large "national" claim paying systems, and thereby having the flexibility to customize the claims processing service.

#### *Blue Cross Blue Shield*

The Blue Cross Blue Shield Association (BCBSA) is a federation of 39 separate health insurance organizations and companies in the United States. Combined, they directly or indirectly provide health insurance to over 100 million Americans. The Company is headquartered in Chicago, IL.

#### *Cigna*

Cigna is a global health services company providing health care plans as well as administrative services. In addition, Cigna has an expanding international footprint in the health services arena. The Company is headquartered in Philadelphia, Pennsylvania.

---



### Industry Summary

Drug spending among new health exchange plan enrollees dropped during the first quarter of 2015 compared with the same period in 2014, according to a new report that seems to reject concerns that healthcare reform would drive up costs because of mandatory coverage of unhealthy Americans. Pharmacy benefits manager Express Scripts found that the number of new enrollees who used at least one prescription medication during the first quarter of 2015 fell 18% compared to the first quarter of 2014.

The analysis evaluated exchange plan medication trends between March 31, 2014, and March 31, 2015, and found new exchange enrollees tended to be younger and had 34% fewer pharmacy claims for specialty drugs. New enrollees also spent less out-of-pocket on drugs overall during the first quarter of 2015 compared to 2014, and had 36% lower plan costs per member per month in the first quarter of this year compared to the year prior.

The findings may represent a positive trend for the Affordable Care Act toward addressing a major point of contention touted by critics, who have argued the law drives up health costs because the numbers of young, healthy individuals enrolling in health exchange plans were not enough to offset the costs being incurred with the addition of millions of older, sicker Americans.

The report did find however that overall, spending on high-cost specialty medications grew 24% in the first quarter of 2015 among health exchange plans compared to just 8% among traditional health plans. Researchers found the rise was driven largely by spending on hepatitis C medications, which increased 96% compared to 2014. Hep C drugs were the third-costliest therapy class among exchange plans.

Health exchange plan enrollees remained a major driver of prescription drug costs, according to the report. It found that 5% of exchange plan patients accounted for more than 68% of total drug spending in 2014. Also, the share of exchange plan patients with drug costs totaling more than \$50,000 in 2014 was more than three times greater than the proportion of Medicaid patients with drug costs exceeding \$50,000.

### Affordable Healthcare Act

In March 2015, Montana joined 28 other states to expand Medicaid to cover more low-income constituents. Montana is set to become the second state this year to adopt the Medicaid expansion, following Indiana's action in January. Debate continues on the issue in states including Alaska, Florida, Missouri, Tennessee and Utah, but the chances of more states signing on are steadily decreasing amid staunch opposition from Republican legislators, even in states with GOP governors who want to broaden Medicaid eligibility.

The White House announced in March 2015, that it added about 4.7 million newcomers through HealthCare.gov for 2015 coverage which would make a total of about 8.8 million people who have picked plans through HealthCare.gov. Across the country, including 13 states that are running their own insurance exchanges, 11.4 million have signed up for insurance for this year. The Obama administration hasn't said how many of these people gained coverage after previously being uninsured.

In June 2015, the United States Supreme Court rejected a major lawsuit against the Affordable Care Act, thereby preserving the largest expansion in health coverage since the creation of Medicare and Medicaid half a century ago.

The stakes of the case were enormous. Had the plaintiffs prevailed who depend upon the Affordable Care Act for insurance would have lost financial assistance from the federal government. Without that money, most of them

---



would have had to give up coverage altogether. And the loss of so many customers would have forced insurers to raise premiums, seriously disrupting state insurance markets.

### Union Membership

In 2013, the union membership rate--the percent of wage and salary workers who were members of unions--was 11.3 percent, the same as in 2012, the U.S. Bureau of Labor Statistics reported recently. The number of wage and salary workers belonging to unions, at 14.5 million, was little different from 2012. In 1983, the first year for which comparable union data was available, the union membership rate was 20.1 percent, and there were 17.7 million union workers.

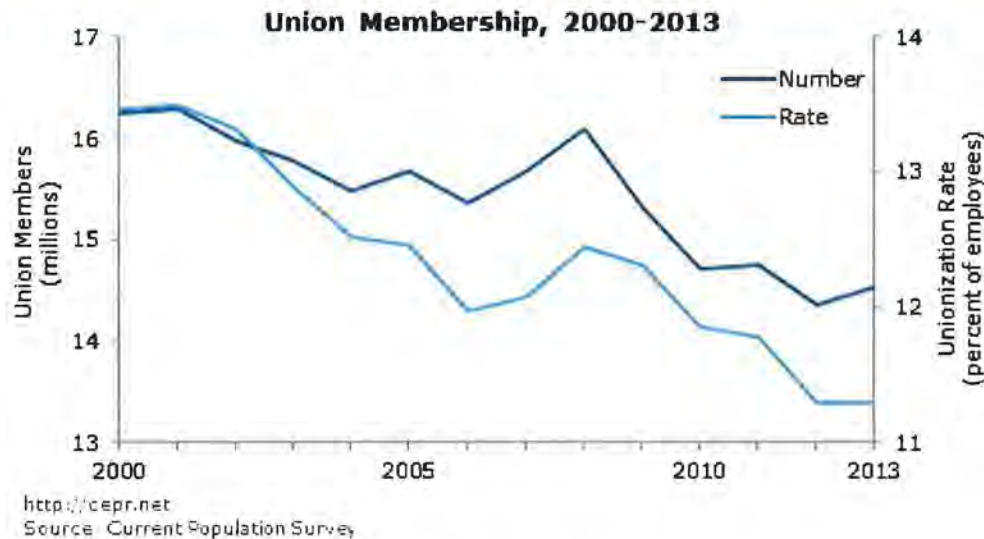


In 2013, 7.2 million employees in the public sector belonged to a union compared with 7.3 million workers in the private sector. The union membership rate for public-sector workers (35.3 percent) was substantially higher than the rate for private-sector workers (6.7 percent). Within the public sector, the union membership rate was highest for local government (40.8 percent), which includes employees in heavily unionized occupations, such as teachers, police officers, and firefighters.

In the private sector, industries with high unionization rates included utilities (25.6 percent), transportation and warehousing (19.6 percent), telecommunications (14.4 percent), and construction (14.1 percent). Low unionization rates occurred in agriculture and related industries (1.0 percent), finance (1.0 percent), and in food services and drinking places (1.3 percent).

Among occupational groups, the highest unionization rates in 2013 were in education, training, and library occupations and protective service occupations (35.3 percent each). Farming, fishing, and forestry occupations (2.1 percent) and sales and related occupations (2.9 percent) had the lowest unionization rates.





### Significant Events

**March 2015:** Negotiations between ABCH and its acquirer have been terminated.

**December 2014:** ABC's holding company, ABCH, completed a Letter of Intent to be acquired by an out-of-state strategic partner.

**September 2014:** Company entered in negotiations with a strategic partner for potential acquisition.

**January 2014:** ABC closes on the acquisition of Stoner & Associates. Company utilizes operational assistance through WVCAP for marketing and website development for the newly formed company.

**December 2013:** WVJIT and WVCAP Board of Directors approve an investment, which is a closely held company similar to ABC to assist in the asset purchase of Stoner & Associates and for working capital.

**September 2013:** ABC announces it will acquire Stoner & Associates, a leading provider of custom benefit plan administration headquartered in Cincinnati. Stoner was founded in 1934 to administer health insurance policies at the local level and has now become a sophisticated TPA specializing in complex plans requiring high client and participant levels. The Company has 13 employees and administers 14 plans with 100 to 6,000 participants and over \$400 million in assets.

**April 2013:** ABC relocated its Trust Department from Chesapeake, Ohio to their main office in Ona, WV.

**January 2012:** ABC named one of two TPA's that can offer JAA to commercial (non-union) clients in the state of Ohio. The initial scope of the project will be school systems and hospitals.

**September 2011:** ABC successfully renegotiated the employee union contract that allowed ABC to no longer "self-fund" their employee insurance program.

**June 2011:** The Anthem/WellPoint partnership, in selling the VEBA/HRA product, is nearly market ready. The ABC Board of Directors elected Ryan Jones as President. Charles Eastwood remains active with the Company as the CEO.

**March 2010:** ABC launched its Health Reimbursement Accounts (HRAs) to its clients and hired Rodney Napier as Chief Marketing Officer to oversee this launch and other new product development. Funds to launch this program and hiring Mr. Napier were part of the WVJIT equity investment.

**December 2009:** The WVJIT Board of Directors approved an investment in ABC, and the Company issued \$700,000 in convertible preferred stock. As part of the equity financing, ABC secured a loan with Chase Bank, backed by an SBA guarantee. The loan was for \$1,150,000 and the entire proceeds were used for the consolidation of five pre-existing loans with relatively short repayment terms and the Company's current line of credit. The Chase/SBA loan is for 7 years at 5.75% interest. In addition to the SBA guarantee loan, Chase also established a \$200,000 line of credit.

#### **Overall Conclusion**

Based on the foregoing, WV Jobs Investment Trust finds it most appropriate to record its investment in American Benefit Corporation at value, which is currently presumed to be the same as cost or **\$699,650**.

---





Company: **ABC Holding Company**  
Website: abcwv.com  
Location: Ona, WV  
Total Employees: FT/71; PT/2  
WV Employees: FT/71; PT/2

**WVJIT Investment: \$499,230**  
**WVJIT Ownership: 8.20%**  
**Subject to GASB 62: NO**

### Leadership

Charles W. Eastwood, Board Chairman  
C. Ryan Jones, Chief Executive Officer  
Jim Kirk, Chief Information Officer  
Kimberly A. Wood, Chief Compliance Officer  
John D. Galloway, Chief Financial Officer

### Background

ABC Holding Company formed in December 2013 following ABC's acquisition of Cincinnati-based TPA, Stoner & Associates. The \$500,000 transaction allowed ABC to have an entry into the Ohio market. Stoner & Associates in comparison to ABC is much smaller in headcount as well as clientele. Stoner provides administration solutions for benefit plan management for defined contribution and defined retirement plans, long-term and short-term disability plans, medical, dental, cafeteria, and medical reimbursement plans.

### WVJIT Investment History

- **January 2014**
  - \$299,404 Convertible Debenture Investment, 8% interest rate. (**\$199,826 from WVCAP**)
  - Converted in April 2014
  - 517 shares of Common Stock

**FY2015 Interest Income: \$33,205.73**

### Products

American Benefit Corporation provides intelligent planning and management on employee health plans. The Company also provides administrative support to ensure efficiency in the life of the benefit plan. Other services include:

- Benefit plan design assistance
- Medical, dental and vision claim processing and adjudication
- Pharmacy Benefits Manager evaluation, implementation and integration
- COBRA/HIPAA administration
- Consumer directed health plans
  - FSA
  - HRA
  - HAS
  - VEBA
  
- Comprehensive care management suite of services
- Network analysis and optimization
- Claims re-pricing
- Disability/loss of time processing
- Coordination of benefits, including Medicare Part D
- Claim Subrogation



Over the past year, the Company has not introduced any new products or services into the market.

### Management Team

#### **Charles W. Eastwood, Board of Directors Chairman**

With more than 25 years of experience in the sales and service of employee benefit programs, Charles Eastwood was appointed as American Benefit Corporation's CEO in 2007. Over his considerable career, he has performed a variety of roles at such notable companies as Prudential and John Hancock Insurance. Mr. Eastwood served 13 years with Blue Cross and Blue Shield of West Virginia prior to becoming a National Account Executive with Cigna. While at Cigna, Mr. Eastwood and his sales team received the Superior Achievement Award for delivering the highest level of sales and service to their client base. After a 10 year stint with Cigna, Mr. Eastwood took the knowledge and expertise he had gained and opened Eastwood Consulting. Mr. Eastwood holds a Bachelor's degree in Political Theory and Philosophy from West Virginia State University.

#### **C. Ryan Jones, Chief Executive Officer**

Ryan Jones joined American Benefit Corporation in 2007. Mr. Jones is a CPA who has an extensive background in public practice including a regional firm that concentrated its practice in the healthcare field. Mr. Jones works closely with the IT and Sales departments to achieve the financial goals of the organization. Mr. Jones holds a Bachelor's degree in Business Administration with a concentration in Accounting from West Virginia State University.



**Jim Kirk, Chief Information Officer**

Mr. Kirk joined American Benefit in 2008, after spending 20 years with Dow Chemical Company as their International Infrastructure Architect. Mr. Kirk is responsible for the design and implementation of information systems and operations. Mr. Kirk earned his Associate's degree in Chemical Technology from West Virginia State University in 1990 and his Bachelor of Science in Business Information Systems from Bellevue University in 1999. Mr. Kirk also holds a MCSE and numerous other certifications.

**Kimberly A. Wood, Chief Compliance Officer**

Ms. Wood joined American Benefit Corporation in 1998 as Assistant Actuary, and was named Director of the Actuarial Department in 2005. She now also serves the Company as an actuary and consultant. She has extensive experience in working with both health and pension funds, including administration, plan design, benefit studies, and federal compliance. Ms. Wood's holds a Bachelor of Arts and Master of Arts degrees in Mathematics from Marshall University. She earned the designation of Enrolled Actuary in 2009.

**John D. Galloway, Chief Financial Officer**

Mr. Galloway joined American Benefit Corporation in 2012, bringing over 17 years of experience in public accounting. Mr. Galloway is a Certified Public Accountant licensed in West Virginia. Mr. Galloway is responsible for coordinating accounting and finance functions as well as identifying opportunities to improve financial and operational systems through internal control evaluations.

Prior to joining American Benefit Corporation, Mr. Galloway served as a Partner at Gibbons & Kawash, A.C. He gained extensive experience addressing complex financial reporting, accounting, internal control, and auditing matters for closely-held businesses, governmental entities, nonprofit organizations, and employee benefit plans.

Mr. Galloway holds a Bachelor's degree in Business Administration from the University of Charleston. Mr. Galloway is a member of the American Institute of Certified Public Accountants and the West Virginia Society of Certified Public Accounts. Additionally, he is a graduate of the 2011 class of Leadership West Virginia Program in conjunction with the West Virginia Chamber of Commerce.

**Board of Directors**

**Charles W. Eastwood, Board of Directors Chairman** (See Management Team)

**C. Ryan Jones, Chief Executive Officer** (See Management Team)

**C. Andrew Zulauf, Executive Director, West Virginia Jobs Investment Trust**

Andy Zulauf has extensive experience in finance and venture capital, having served as Executive Director and Senior Loan Officer for the West Virginia Capital Corporation, as a Partner and Managing Director of West Virginia operations for Adena Ventures, and as Vice President and Upper Middle Market Commercial Relationship Officer for Fifth Third Bank. Mr. Zulauf is a graduate of Marshall University and the University of Charleston's Executive MBA program.

---

### Market Summary

#### Third Party Medical Payments

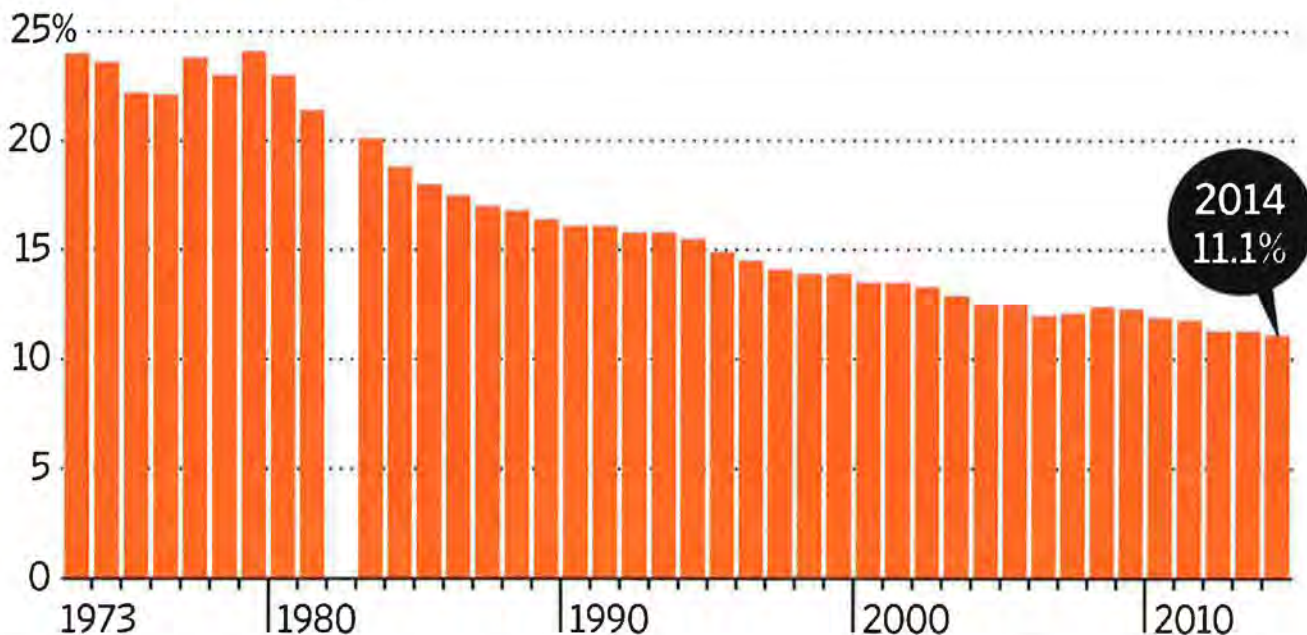
Since November 2014, The ACA is more unpopular than ever; in November 2014, only 37% of Americans approved of the federal overhaul compared with 56% opposed, according to Gallup. And thanks to higher out-of-pocket costs under the ACA—including deductibles averaging more than \$5,000 for so-called bronze plans—one in three Americans said they or a family member delayed seeking medical care in 2014, according to a Gallup survey.

Many physicians, which have been left out of the fray from the bureaucratic discussions, are planning to introduce new solutions to offset third party platforms. These alternative models, such as concierge services, have grown over the past several quarters. A 2014 survey conducted for the Physicians Foundation found that 20% of physicians either practice or are planning to transition to one of these alternative models in the next several years.

### Industry Summary

## Union Membership's Steady Decline

Percentage of employed workers who are union members



Sources: unionstats.com (1973-2003);  
Bureau of Labor Statistics (2004-14)

Note: 1982 statistics unavailable  
The Wall Street Journal

The rate of U.S. union membership fell slightly in 2014, continuing a trend that suggests the labor movement will have to step up efforts to rebound from its decade-long slide.



Figures released by the Bureau of Labor Statistics said the combined rate of private/public-sector union membership was 11.1% last year, down from 11.3% the prior year. Membership in the private sector fell to a rate of 6.6% in 2014, from 6.7%, while public-sector representation rose slightly to 35.7%, from 35.3%.

Union membership rates declined over the year in 27 states and the District of Columbia. They rose in 18 states and were unchanged in five. Michigan, a traditionally heavily unionized state at a center of U.S. manufacturing, underscores the labor movement's challenge to rebuild in a changing economy. It fell to the 11<sup>th</sup> most unionized state last year from 7<sup>th</sup> the year before, dropping out of the top 10 category, where it had long held a place.

The membership rate in the public sector was once a bright spot for union growth, but has taken a hit in recent years amid the sector's employment declines in cash-strapped states. Unions added a net of roughly 8,000 members, driven by gains at the local levels, primarily teachers. State-level membership saw big declines.

Overall, 7.2 million employees in the public sector belonged to a union last year compared with 7.4 million employees in the private sector. The 14.6 million total was "little different" from 2013 according to a government report. In 1983, the first year for which comparable data are available, there were 17.7 million union workers, and the rate was 20.1%.

#### **Significant Events**

**April 2015:** ABCH is in discussions to acquire and add a local business consulting company within ABCH. The consulting company specializes in healthcare and insurance.

**March 2015:** ABCH and its strategic partner have terminated acquisition negotiations.

**December 2014:** ABCH signed LOI for acquisition by strategic partner, terms of the agreement are undisclosed and negotiations will continue.

**May 2014:** ABCH reported strong financial 1Q14 performance following the acquisition of Stoner & Associates. Management team announced several prospects the Company was hoping to close by mid-year.

**March 2014:** ABCH engaged Malone Consulting, Kick-it, LLC and Wolfe Design for marketing and website development. Funds were provided through WVCAP's Operational Assistance Fund.

**December 2013:** WVJIT Board of Directors approved an investment of up to \$500,000 in ABC Holding Company.

#### **Overall Conclusion**

Based on the foregoing, WV Jobs Investment Trust finds it most appropriate to record its investment in American Benefit Holding Company at value, which is currently presumed to be the same as cost or **\$499,230**.

---



**Snapshot:**

Company: **Berkeley Springs Instruments**  
Website: bsientry.com  
Location: Berkeley Springs, WV  
Total Employees: FT/7; PT/3  
WV Employees: FT/3; PT/0

**WVJIT Investment: \$500,000**  
**WVJIT Ownership: 0.0%**  
**Subject to GASB 62: NO**

**Leadership**

**Eugene Silverman, Ph.D., President**  
**Rob Leary, Vice President of Sales**

**Background**

Berkeley Springs Instruments, LLC (BSI), located in Berkeley Springs, WV, has pioneered the development of innovative remote sensing and remote controlled and robotic technology for over 30 years. BSI and their legacy companies have designed and fabricated remotely controlled inspection systems, robotic machines and unique monitoring systems for the real-time assessment of mechanical structures worldwide.

BSI specializes in the fabrication of innovative ultrasonic sensors and multi-parameter sensor networks for monitoring the mechanical integrity of tanks, pressure vessels and pipelines. BSI develops proprietary software and hardware that provides a positive environmental benefit, protects personnel, and enhances current and future energy resources while helping customers perform in a competitive environment.

BSI serves a broad range of industries including petroleum, petrochemical, electric utilities, pharmaceuticals and municipalities.

**WVJIT Investment History**

- **April 2013**
  - \$500,000 Convertible Note accruing 8% interest due at maturity (March 19, 2015). The Convertible was disbursed in two tranches upon meeting pre-determined milestones. The second tranche matures December 2015.No Warrant Coverage

**Total WVJIT Investment: \$500,000 (\$250,000 funded through WVCAP)**

**Co-Investors/Lenders:**

Eugene Silverman  
Pamela Silverman  
Michael O'Connell  
Phil Sturman



WVJIT Unpaid Interest: As of June 30, 2015 \$44,729.50. The first tranche of \$250,000 is over 90 days delinquent. The payoff of the first tranche was expected prior to June 30, 2015; however, funding was not secured by Mr. Silverman in time. Payoff of the first tranche was received July 31, 2015.

### **Board of Directors/Management**

#### **Eugene Silverman, Ph.D., President**

Dr. Eugene Silverman received a bachelor of science degree in Physiology and Human Factor Engineering from the University of Maryland at College Park in 1969 and his doctorate in Human Factors, Mechanical Engineering and Acoustics from The Catholic University of America in 1976.

Dr. Silverman is an industrial technologist with over 35 years of experience in the design and fabrication of smart sensors and remotely controlled/mobile robotic systems for tank inspection, pipeline inspection and mechanical integrity assessment. His work includes equipment concept design, product development and product manufacturing. Dr. Silverman has pioneered the application of a range of mechanical integrity assessment techniques for storage tank, piping and pipeline management programs.

Dr. Silverman managed the development, fabrication and commercialization of over 12 unique robotic systems used for the cleaning and inspection of over 1,500 storage tanks worldwide. In addition, he has over 20 years of experience in the operation and maintenance of commercial nuclear reactors. He also has been granted six patents and has two additional patents pending.

#### **Rob Leary, Vice President of Sales**

Rob Leary is COO and Sales Manager of BSI. Mr. Leary has a deep knowledge of the oil and gas industry and the water and wastewater market.

Mr. Leary lists the following experiences and specialties: direct sales, international sales, business development, set up and management of manufacturer's representative network, negotiating multi-year contracts, launching new products, relationship building with key customers, relationship management with alliance partners, and Six Sigma.

From 2003 to 2005, Mr. Leary was a Core Account Manager at Praxair, Inc., covering a \$5 million territory in Alabama, Tennessee, Missouri, Arkansas and Georgia. From 2005 through 2007, Mr. Leary covered the northern United States and Canada. In January of 2008, he became the Midwest Sales Manager for HMT Inc., covering a \$13.5 million territory ranging from North Dakota and South Dakota to Kentucky and Ohio. In July of 2009, Mr. Leary served as HMT's National Sales Manager of Water and Wastewater, which covers the United States and Canada.

#### **General Richard L. Neal, Board Member**

General Neal is currently serving as Director of Audio MPEG and Sisvel US patent licensing company located in Alexandria, VA. General Neal is a four-star general whose career spans nearly three decades. Since retiring in 1988, he has gained extensive private sector experience in the areas of intellectual property and in working with defense-related companies while serving on the Boards of several companies.

---



**Guy Peduto, INNOVA Commercialization Group**

Guy Peduto joined the INNOVA Commercialization Group in April 2006. Prior to joining INNOVA, he held the position of Director of Commercial Programs at the Institute for Scientific Research, Inc. While there, he developed strategies for the commercial utilization of ISR's technology and research applications in such areas as biomedical research, education, software development, mining safety and communication, VTOL aerial vehicles and automotive controls and diagnostics.

Mr. Peduto's background includes 20 years of strategic planning experience with an emphasis on product introduction, leadership for early stage and start-up companies as well as market and business development. This experience includes business formation, product development, go-to-market and market development strategies for industrial and commercial manufacturers, consumer goods, advanced research and development, healthcare, financial institutions, Internet start-ups and retail chains.

As a participant and contributor to West Virginia's technology-based economic development movement, he serves on the Board of Directors of TechConnect and executive committee of TechConnect WV, as a member of the WV Angel Network working group, the West Virginia Development Office and the West Virginia Small Business Development Center's Advisory Board of Directors, the I-79 Development Council and West Virginia Biometrics Initiative.

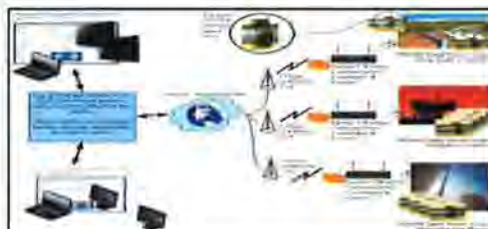
Mr. Peduto received a Bachelor's degree in Business Administration with a major in Marketing from West Virginia University. In addition, he is a graduate of the Competitive Strategy program at the Kellogg School, Northwestern University, the Commercialization and Technology Transfer program at Carnegie Mellon University, the National Association of Seed and Venture Funds Professional Development Program and the Venture Capital Institute. He is also a member of the Leadership West Virginia Class of 2004.

**Michele O'Connor, West Virginia Jobs Investment Trust**

Michele O'Connor has more than 25 years of experience in the finance and banking industry. She attained her Certified Financial Planner designation along with the Accredited Investment Fiduciary Manager designation. She was the Portfolio Manager for the Trust Department at First United Bank and managed over \$600 million for the department. Currently, Ms. O'Connor is the Investment Manager for the West Virginia Jobs Investment Trust, a leading venture capital firm focused on turning the innovation of new ideas into successful world-class companies. Ms. O'Connor graduated Magna Cum Laude with a BA in Finance from the University of Maryland College.

**Products**

The BSI Eagle Array merges Ultrasonic Testing with wireless cellular technology.





**Eagle Array: Wireless Remote Mechanical Integrity Monitoring System for Infrastructure Management**

Features

- Low-power ultrasound material evaluation
- Wireless communication (cellular service provided by Sprint®)
- Solar-powered option
- Installed on wide variety of mechanical structures
- Expandable sensor inputs to accommodate vibration, moisture and atmospheric monitoring
- Inexpensive to manufacture
- Internet-accessible: Sensor gateway through a portal onto the customers desktop

Advantages

- Proprietary and patented (software)/patent pending technology (system)
- Provisional system utility and method patent
- Prototype system operational: existing remote monitoring sensor (corrosion monitoring and seismic) gateway established
- Oil industry endorsement and collaboration

Development

- 7 Commercial (beta) units in the field
- Validation program near completion for one customer (AERA, Bakersfield, CA)
- Collecting monthly monitoring revenue
- Currently working on 2nd generation electronic packaging
- Initiated guided wave development to expand capability
- Underground installation complete and monitoring underway
- Beta solar unit completed and operational
- Joint testing program underway with major global mechanical testing and inspection organization

**Competition/Market Summary**

The big players who provide the different level sensor technologies for end user applications and customized services are Siemens AG (Germany), ABB Ltd. (Switzerland), Endress+ Hauser AG (Switzerland), Emerson Electric Co. (U.S.), Honeywell International, Inc. (U.S.), Gems Sensors & Control Co. (U.S.), Magnetrol International Inc. (U.S.), Vega GmbH (Germany), and Pepperl+Fuchs AG (Germany). Swiss-based TE Connectivity acquired US-based Measurement Specialties for \$1.7B in June 2014.

---



### Industry Summary

The Global Sensors Market is expected to reach \$4.87 billion by 2020, according to a new study by Grand View Research, Inc. Increasing global demand in application segments, particularly in process industries and automobiles is expected to drive the level sensors market over the forecast period. Environmental applications are also expected to grow considerably over the forecast period.

However, the use of non-contact sensor is expected to grow at a considerable rate particularly in hazardous environments. Level sensors are increasingly reducing in size for their use in remote applications and integration in electronic devices particularly in industrial and consumer electronics applications.

Additional findings from the research suggest:

- Process industries, environmental and automotive applications are expected to be key segments over the forecast period. Water treatment in developed and developing nations is a significant market for level sensors, which includes solutions designed for sewer water, gray water, industrial effluent and clean water.
- Increasing concerns to avoid water wastage has pushed manufacturers towards more efficient applications. These sensors are also used to get information on reusability of water, which is evident in newer consumer appliance designs such as smart washing machines to maintain certain water levels in the wash cycle by using fluid sensors.
- The North America level sensors market accounted for over 25% of the global demand but is expected to grow at a sluggish rate over the forecast period. Asia Pacific is expected to be the key regional segment over the next six years and will be driven by technology advancements increasing demand for high-performance sensors used for environmental and process industries applications.
- Water and wastewater management is expected to be the dominant application sub-segment, which includes drinking water, sea water desalination, sewage, raw water, industrial effluent. In developed economies such as Germany, UK and U.S. waste water and industrial water treatments is expected to be major segments owing to strict environmental regulations for conserving water.

### Significant Events

**June 2015:** Berkeley Springs Instruments provided a reorganizing plan to organize the Company and prepare for the next round of funding. Both lenders (WVJIT and INNOVA) are reviewing the proposal.

---



The BSI, LLC membership voted a new member to the Board (replacing Mr. O'Connell), General Richard I. Neal. General Neal is currently serving as Director of Audio MPEG and Sisvel US patent licensing company located in Alexandria, VA. General Neal is a four-star general whose career spans nearly three decades. Since retiring, in 1988, he has gain extensive private sector experience in the areas of intellectual property and in working with defense-related companies while serving on the Boards of several companies.

**June 2014:** The second quarter 2014 sales and marketing report reflected several items in the pipeline. A prospective client engaged BSI in a plug-n-play modification of the Eagle array. Comparing 2014 to 2013 (same time period), Array customers were 9 and 2 respectively. The Company worked on IMPACT, an ultrasound pulse acquire process system which can be used outside of the Array.

**March 2014:** BSI indicated sales and development were ahead of schedule and will look for next round of financing. Projections are on track. In June 2014, the Company will need to look for the next phase of funding. Additionally, the Company finalized a partnership with major prospective clients.

**February 2014:** BSI was honored and awarded the Governor's Award at the IOF-WV Innovation Day for Leadership in Advanced Green Manufacturing for "development and production of solar powered Eagle Array Wireless Sensors that monitors pipeline integrity."

**December 2013:** BSI had several projects for 1Q 2014, with an anticipated revenue of over \$100,000. The Company was working with Tulsa University Sand Management Projects (TUSMP) on erosion tests on the Eagle Array. The findings of this test will be shared with the TUSMP advisory board.

BSI was working to obtain Metlab Certification. This certification will allow the Company to sell its Array to those refineries who require such certifications. BSI was also working on a "Hockey Puck" transducer product. It mimics the Eagle Array, but on a smaller scale. It uses the same hardware and software as the Eagle Array.

**September 2013:** BSI shifted to a multi-layered sales strategy, aggressively targeting upstream, midstream and down-stream clients for the petroleum, energy and chemical industries. The Company provided a very strong pipeline of prospective customers.

**April 2013:** BSI closed on funding transactions with WVJIT and INNOVA.

#### **Overall Conclusion**

Based on the foregoing, the WV Jobs Investment Trust finds it most appropriate to record its investment in Berkeley Springs Instruments, LLC at value, which is currently presumed to be the same as cost or **\$500,000**.

---



omnipledge

**Snapshot:**

Company: CampaignR, LLC  
Website: omnipledge.com  
Location: Morgantown, WV  
Total Employees: FT/2; PT/0  
WV Employees: FT/2; PT/0

WVJIT Investment: \$55,000  
WVJIT Ownership: 0.0%  
Subject to GASB 62: NO

**Leadership**

Ricky Kirkendall, Co-President  
Sam McLaughlin, Co- President

**Background**

CampaignR, LLC is a newly formed application software Company set to launch its initial software product called Raisin. Raisin provides cloud-based software solutions for non-profit organizations, family foundations, religious institutions, and political campaigns. These solutions include donor registry, database management, and predictive analytics. Though in its infancy, the Company plans to expand its solution capability to connect to social media networks such as Facebook and Twitter. In addition, the Company offers professional services, including consulting, support, and training services to its customers to facilitate the adoption of its cloud solutions. CampaignR sells and markets its services on subscription basis. The Company was founded in 2013 by West Virginia natives Ricky Kirkendall and Sam McLaughlin. It is headquartered in Morgantown, WV.

**WVJIT Investment History**

- **October 2013**
  - \$110,000 Promissory Note; 7% Interest Rate
  - Initial disbursement: \$55,000; Follow-on Disbursement will occur after Company achieves \$10,000 in gross sales in six months following the initial disbursement.
  - Warrants: 10% priced at \$10.00 with no expiration date.
  - Company failed to achieve gross sales milestone; WVJIT ownership changed from 5% to 10%.
  - Maturity: October 2015

**FY2015 Accrued Interest: \$2,797.78**

**Co-Investors/Lenders/Board Members**

Lawrence Fine      Andrew Zulauf  
Mike Green  
Paul Gabriel

---



### **Products and Services:**

**Raisin-** Cloud-based fundraising CRM platform for non-profits primarily leading through its mobile application for both the iPhone and the Android devices.

**OmniPledge** – SMS based donation service that can be used by individuals, organizations and politicians to take donations. This will be the Company's primary operating product line.

**Legacy-** Nonprofit Social Media platform for nonprofit organizations and donors

### **Competition/Market Summary**

**Mobile Cause** – Mobile Cause is an integrated fundraising and communication platform designed to do three things: 1—Gain New Donors, 2—Increase Recurring Gifts and 3—Engage Supporters. This cloud based platform works to transform charities, churches, universities, nonprofit organizations, political groups, socially responsible corporations and philanthropists into mobile fundraising experts. Customers gain access to powerful and easy to use tools for compelling mobile and social campaigns.

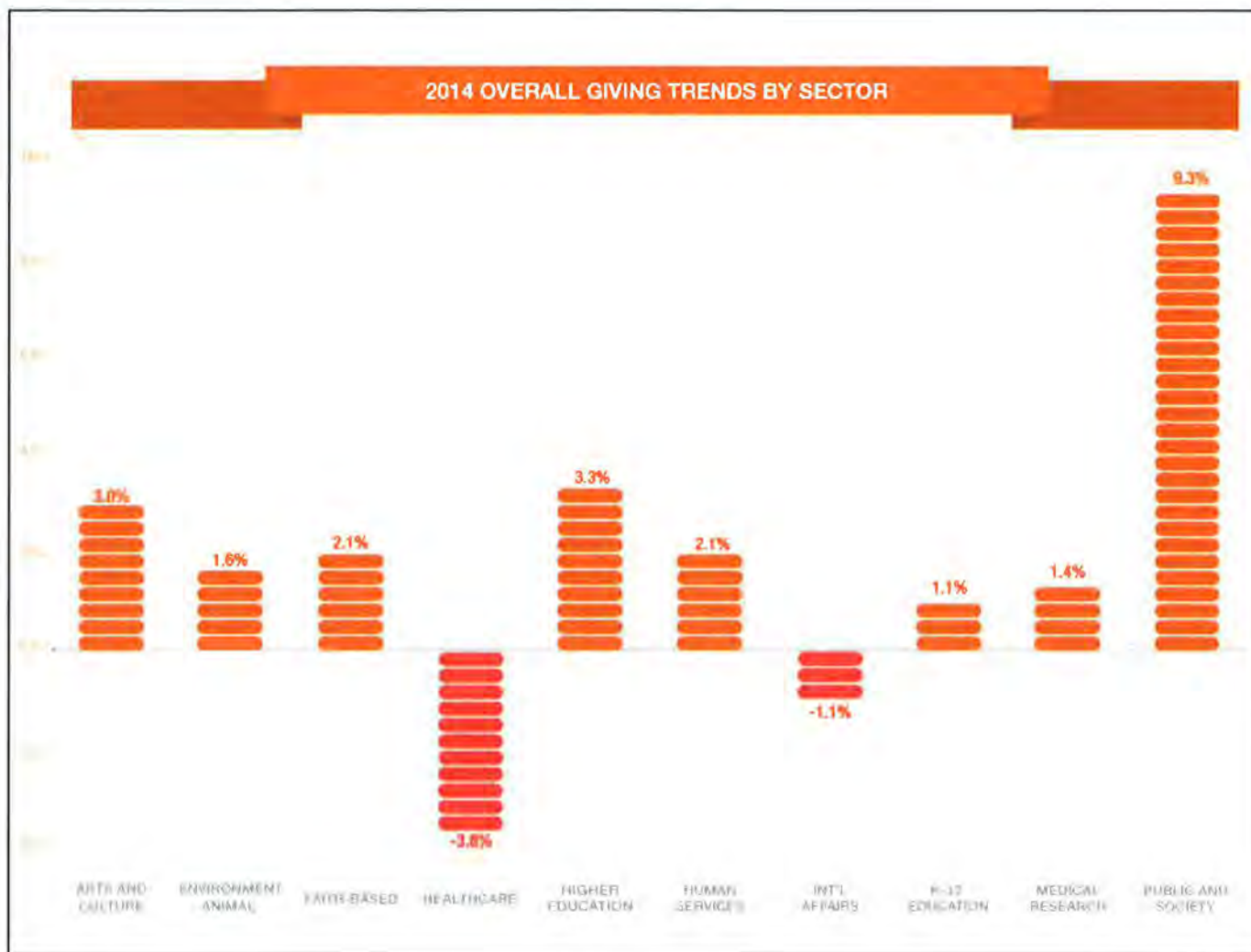
**Give By Cell-** Launched in 2008, Give by Cell is a trusted Mobile Fundraising solution provider with more than four years of experience in providing unique, affordable, and effective mobile technology services to more than 2,000 organizations. It offers three main Mobile Fundraising platforms: Mobile Give, Mobile Donate and Mobile Pledge, all of which allow organizations to accept donations via text message and expand fundraising capabilities through mobile technology.

### **Giving Trends by Nonprofit Sector**

Each organization in The Blackbaud Index is categorized by one of ten sectors using its NTEE code as reported on its 990 tax return. These sectors are Arts and Culture, Environment and Animal Welfare, Faith-based, Healthcare, Higher Education, Human Services, International Affairs, K-12 Education, Medical Research, and Public and Society Benefit. Each sector is weighed based on Giving USA data to ensure that no individual organization or sector is over represented in the analysis.

Public and Society Benefit organizations had the largest increase in year-over-year fundraising with 9.3% growth. This was followed by Higher Education institutions with a 3.3% growth rate. Arts and Culture organizations grew 3% compared to 2013. Faith-based and Human Services organizations both had a 2.1% increase in fundraising during 2014.

---



### Industry Summary

According to the Chronicle of Philanthropy, 2015 will be a big year for non-profit donations. Particularly as more wealthy families look to make up for smaller-than-expected donations last year. Probably the biggest trend we will see is the trend of Crowdfunding Platform's new mission. In a new wrinkle for online giving platforms, GlobalGiving is nudging the more than 4,000 nonprofits and social entrepreneurs it raises money for to improve their work and not just chase dollars. One carrot: Groups that collect and use feedback from those they serve will be awarded extra points in GlobalGiving's rating system—points that should earn them more attention and more donors.

In addition, nonprofits are increasingly offering how-to fundraising help and technology to supporters, some of whom are inspired to spark the next ice-bucket challenge. Last summer's fundraising juggernaut is not likely to be repeated, says David Hessekiel, president of Peer-to-Peer Professional Forum, but smart nonprofits should harness the passion of would-be fundraisers. The World Wildlife Fund last spring started Panda Nation, which helps supporters turn birthdays, bar/bat mitzvahs, bake sales, and athletic competitions into fundraising events.



### Significant Events

**May 2015:** Company set to launch Legacy platform in Summer 2015.

**March 2015:** Company continues to work on the Software Development of the Legacy Platform and provided the Board of Directors a 2015 Budget forecast.

**December 2014:** The Company provided user-based milestones for its Legacy product. To obtain \$27.5K of the second disbursement, the company needed to achieve 5,000 users. The second half of the disbursement was to be triggered upon the Company achieving a total revenue milestone determined by the Company and the Board of Directors.

**June 2014:** CampaignR introduces Omnipledge, the SMS donation platform to work in conjunction with existing online platforms.

**March 2014:** CampaignR continues business development for the Raisin Platform and meets with nonprofit and political organizations within WV. The Company also participates in Innovation Day at the capital.

**December 2013:** CampaignR develops the mobile application software for both iPhone and Android devices. The Company also became one of the first tenants at WVU's Launchpad, the University's entrepreneurial incubator.

**October 2013:** CampaignR closes a \$110,000 promissory note investment from WVJIT.

### Conclusion

Based on the foregoing, the WV Jobs Investment Trust finds it most appropriate to record its investment in CampaignR, LLC at value, which is currently presumed to be the same as cost or **\$55,000**.

---



**Snapshot:**

Company: **Cross Cutting Concepts, LLC**  
Website: CrosscuttingConcepts.com  
Location: Huntington, WV  
Total Employees: FT/1; PT/2  
WV Employees: FT/1; PT/2

**WVJIT Investment: \$150,000**  
**WVJIT Ownership: 9.38%**  
**Subject to GASB 62: NO**

**Leadership**

**Derek Gregg, Chief Executive Officer**

**Background Information**

Crosscutting Concepts, LLC formerly known as Vandalia Science Education, was founded as a division of Vandalia Research in 2006. It started with one hands-on laboratory kit on DNA typing. Through a distribution partnership with Fisher, the product line grew to six kits on forensic science and launched 812 Grandview Dr, Dunbar, WV 25064 in January 2007. In January 2010, an additional six kits were slated for development and were launched in January 2011. Also in 2011, distribution was dramatically expanded, resulting in substantial sales growth. The final two Lyle & Louise modules were launched in the fall of 2011. In 2013, the Company partnered up with EMC Publishing to develop a series of engaging, hands-on laboratory kits.

**WVJIT Investment History**

- **October 2012**
  - WVJIT Invested \$150,000, following the Company achieving matching funds from First Sentry Bank and a private investor. (\$150,000 funded through WVCAP).

**Warrants:**

10% Warrant Coverage (50,000 units: Series A Preferred Units). Warrants shall be good for 7 years and exercised at a \$1.00 per unit strike price.

**Total WVJIT Investment: \$150,000 (\$150,000 funded through WVCAP)**

**Co-Investors/Lenders:**

First Sentry Bank  
Joan Weisburg



### **Management Team**

#### **Derek Gregg, Chief Executive Officer**

Derek Gregg is the primary day-to-day manager of Vandalia Research. He is responsible for the financial and personnel resources of the Company, purchasing, communications, and other management duties. He plays a large role in writing grants, patents, and developing strategic partnerships. He is also currently directing the sales and marketing activities of the Company. Mr. Gregg is a graduate of Marshall University and serves as Chair of the BioScience Association of WV.

### **Board of Directors**

#### **Derek Gregg, Chief Executive Officer (See Management Team)**

#### **Patrick Bond, Mountaineer Capital**

Managing Director of McCabe-Henley Properties LP since 1998, Pat Bond brings a wealth of experience in finance, administration, strategic planning, general management and management information systems. Previously, Mr. Bond owned/operated an independent consulting practice, Growth Management Group that specialized in the areas of Business Environment Assessments, new product development, investment and financial analysis and strategic planning. Prior to that, he was President of a natural gas marketing company and was President and CEO of Atlantic Financial Federal, a \$750 million savings and loan institution and all its business units. He graduated from WVU where he received both Master's and Bachelor's Degrees in Industrial Engineering.

#### **C. Andrew Zulauf, Executive Director, WV Jobs Investment Trust,**

Andy Zulauf is the Executive Director of the West Virginia Jobs Investment Trust, a public seed investment fund. He has extensive experience in finance and venture capital, having served as Executive Director and Senior Loan Officer for the West Virginia Capital Corporation, as a Partner and Managing Director of West Virginia operations for Adena Ventures, and as vice president and upper middle market commercial relationship officer for Fifth Third Bank.

### **Products**

*The Mystery of Lyle and Louis-* Premier forensic science curriculum designed for high school and introductory undergraduate education. Comprised of independent hands-on laboratory modules, Lyle and Louise introduces students to a broad range of techniques in forensic analysis, including DNA Typing, Questioned Document Examination, Forensic Entomology, Bite Mark Analysis, Blood Spatter Analysis, Hair and Fiber Analysis, and more.

*Desolation: STEM-* The latest product from Crosscutting that compels students to solve problems involving design, development, evaluation and improvement. Students are exposed to the subjects of astronomy, engineering, chemistry, and physics in this unique four-moduled product.

*Biotech by Ellyn-* Crosscutting has partnered with EMC Publishing and author Ellyn Daugherty to develop and market Biotechnology by Ellyn Daugherty™, a series of engaging, hands-on laboratory kits to accompany the best-selling textbook and laboratory manual Biotechnology: Science for the New Millennium. Designed for introductory

---

courses, this program teaches the concepts and hands-on lab procedures required for entry-level careers in the rapidly growing biotechnology industry.



### **Competition/Market Summary**

**Carolina Biological Supply Company (Burlington, NC):** Supplier of hands-on science and math education products and services that help students of all ages learn and understand science and math.

**Edvotek (Washington, D.C.):** Supplier of biotechnology kits and equipment designed specifically for education.

**Aldon (Hanover Park, IL):** Manufactures educational kits for its own Innovating Science brand. Aldon is a subsidiary of Thermo Fisher Scientific.

### **Industry**

In 2015, \$100 million in federal grants were made available through White House initiative, TechHire. This supports a potential workforce by providing training and certification for those looking to enter a technical field or career. More and more high schools and universities across the country are implementing STEM education training, courses, and certification programs. Yet, there is now an even greater push to introduce robotics in STEM education as more engineers will be needed.



# ROBOTICS IN STEM EDUCATION

## What is STEM Education?



SCIENCE



TECHNOLOGY



ENGINEERING



MATH

STEM fields are considered the core technological underpinnings of an advanced society by the United States National Research Council and the National Science Foundation



**KUKA** Robotics has helped advance both teachers and students in STEM education through trainings and advanced **KORE** packages



## The Importance of STEM Education



**16%** of American high school seniors are proficient in mathematics and interested in a STEM career.  
-US Department of Education

**30%** of high school seniors who took the ACT test were cleared for college-level sciences



### GROWING JOBS IN STEM CAREERS

The government has seen a growing number of jobs in STEM careers with a limited number of qualified individuals to fill the positions

## The STEM Plan



The President's Fiscal Year 2015 Budget Proposal was designed to include improvements in the teaching and learning of STEM subjects

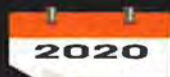


## Robotics in STEM

**ROBOTICS INTEGRATES ALL OF THE STEM FIELDS IN A WAY NO OTHER SUBJECT CAN COMPARE**



Workers in the robotics field are highly trained engineers



**10.3% BY 2020**

The expected job growth for the engineering field by 2020 is 10.3%



## Life in Robotics After Graduation





### Zaniac

Women in the U.S. make up half the national workforce, but when it comes to careers in STEM (science, technology, engineering and math), men outnumber women 3 to 1.

Camilla Gazal and Flavia Naslausky are two Brazilian-American moms in Connecticut on a mission to close that gap. As the first franchisees with the new company Zaniac, they are offering an opportunity for young girls -- and boys -- to fall in love with STEM. Their vehicle is Zaniac, which offers after-school "campuses" for kids in grades K-8. Unlike traditional tutoring, Zaniac offers activities like robotics using LEGO, computer coding, 3D printing, app design and lessons about physics using the game Minecraft.

With their nearly 40 years of combined experience in the male-dominated financial industry, Gazal and Naslausky are using that business expertise to start reversing the shortfalls of STEM curricula.

The women have some ready-and-willing guinea pigs to practice on: They are the mothers, between them, of five children, ages 8 to 13. And both have previously worked to bolster their children's math education at home. Now they have a more formalized system to expand their mission to make up for the gaps in K-8 education -- and maybe even make some money along the way.

### Significant Events

**June 2015:** The Company will be under the direction of a new president/CEO upon the review and discussion by the Board of Directors.

**December 2014:** Executive team introduced 2015 budget to the Board. Revenues are expected to rise compared to the year ago period based upon more projects by existing customers. Company discussed possible new products to be developed. Derek Gregg announced to the board his departure to pursue business school. His expected departure is during 3Q of 2015. Justin Swick also departed from the Company.

**December 2013:** The Company was in preliminary collaboration discussions with NASA Outreach, AquaPhoenix and Texas Instruments.

**September 2013:** Crosscutting Concepts has partnered with EMC Publishing and author Ellyn Daugherty to develop and market, "Biotechnology by Ellyn Daugherty," a series of engaging, hands-on laboratory kits.

**August 2013:** Crosscutting Concepts announces new bundles available for its Desolation: STEM Series. The new bundles are Earthbound and Down Mass Driver (astronomy) and High and Dry Solar Water Heating (geology and environment).

**February 2013:** Two new desolation kits launched; Larry Nitardy was hired as part-time marketing consultant to assist with business marketing. Crosscutting Concepts also hired its first salesperson for business development.

**October 2012:** Crosscutting Concepts achieved \$150,000 in matching funds from First Sentry Bank and a private investor. WVJIT matched the \$150,000 with WVCAP funds.

**July 2012:** WVCAP Committee and WVJIT Board of Directors approved an investment in Crosscutting Concepts for up to \$300,000 with a 10% warrant coverage pending achievement of matching funds.

---



**Overall Conclusion**

Based on the foregoing, WV Jobs Investment Trust finds it most appropriate to record its investment in Crosscutting Concepts, LLC at value, which is currently presumed to be the same as cost or **\$150,000**.

---



**Snapshot:**

Company: **Dynamic Physical Therapy, LLC**  
Website: dynamicpt.org  
Location: Pleasant Valley, WV  
Total Employees: FT/24; PT/18 – Total FTE 31  
WV Employees: FT/24; PT/18

**WVJIT Investment: \$0.00 (6/30/15 Balance)**  
**WVJIT Ownership: 0.0%**  
**Subject to GASB 62: NO**

**Leadership**

Lincoln Kinkade, Co-Owner  
Phil Cooke, Co-Owner

**Background**

Dynamic Physical Therapy, LLC founded in 2003, is based in Westover, WV and provides a full range of physical therapy and chiropractic services at a total of seven locations located throughout North Central West Virginia.

Dynamic Physical Therapy focuses on hands-on manual techniques. Mechanical procedures, devices and technology are only used to facilitate and further enhance their manual therapy practices. Dynamic Physical Therapy offers a full range of physical therapy services. The Company offers Aquatic Therapy, Balance/Vestibular Programs, Industrial Rehabilitation, Pediatric Therapy, Pre-Operative and Post-Operative Rehabilitation, Spine Rehabilitation, Specialized Hand Therapy, Sports/Medicine General Orthopedic, Sport Specific Rehabilitation, Electrical Stimulus, Home Exercise Programs, Iontophoresis, Phonophoresis, Manual Therapy, Paraffin Bath, Traction and Ultrasound.

**WVJIT Investment History**

- **July 2012:**
  - \$300,000 Secured Note, 4% interest with monthly payments.
  - Maturity: October 4, 2014 – Full payoff received.

**Balance WVJIT Loan: \$0 (\$300,000 originally funded through WVCAP).**

**FY2015 Interest Received: \$2,292.52**

**Co-Investors**

Lincoln Kinkade  
Phil Cooke

---



**Management and Administrative Team**

**Lincoln Kinkade, PT,** Owner

In 2003, Mr. Kinkade opened his first location in Morgantown. He proceeded to expand his locations and in 2008 partnered with Phillip Cooke.

**Phillip Cooke, PT, MPT, MS, CSCS,** Owner

Mr. Cook received his MPT from Slippery Rock University and his MS from West Virginia University

**Rob Acciavatti, PT, MPT, OC, CSCS** - Westover, WV

Mr. Acciavatti has been with the company since 2006.

**Eric Beard, PT, MS** - Fairmont, WV

Mr. Beard has been in his position since 2006.

**Kim Goodrich, PTA-** Pleasant Valley, WV

Ms. Goodrich has been in her position since 2010.

**Casey Jackson, PT, DPT** - Jane Lew, WV

Mr. Jackson has been in her position since 2010.

**Chris Jones, PT, MP** - Sabraton, WV

Mr. Jones has been in his position since 2006.

**Amy Manning, PT, DPT** - Bridgeport, WV

Ms. Manning has been in her position since 2011.

---



### Products

Dynamic Therapy is an outpatient physical therapy center that specializes in the treatment of orthopedics, hand, spine, and sports injuries. The company offers a list of services such as hand therapy, strength training, gait training, massage, electric stimulation, fluidotherapy, ultrasound and phonophoresis. The Company installed a new pool in the Sabraton location. With the addition of the pool, the Company can now offer aquatic therapy at that location.



### Competition/Market Summary

The Company has competitors in each of its market areas.

- Morgantown – Healthworks is the main competition. Healthworks is a high volume practice with only one location near Mon-General Hospital, which limits their access to patients located on the perimeter of Morgantown.
- Fairmont – Mountain State and Country Roads are the main competitors. Dynamic's referral system has not been affected by either of these practices.
- Bridgeport – Bridgeport Physical Therapy is a strong locally owned practice, but operates on high volume. Due to Dynamic's patient volume, the Company has been able to gain market share. Clemens Physical Therapy and Bridgeport Physical Therapy are the Company's competitors.
- Jane Lew – No competitors.



## Industry Summary

### 7 Predictions for Physical Therapy in 2015

According to a rehab publication, there will be seven trends that will be occurring in the physical therapy industry in 2015. As part of an industry overview, experts note that the physical therapy industry is consolidating and becoming more complicated. Below are the predictions:

1) **“Referral management game.”** Consolidation will put pressure on physicians to join hospitals, ACOs, and larger networks, which will impact how and when physicians rear to independent physical therapy practice. In 2015, PTs will need to be prepared with a strong referral strategy.

2) **Small practices will become increasingly rare.** The days of small independent practices are not completely gone, but small practices will become more rare in the coming years. Independent physical therapy practices must create a unique value proposition that is dramatically better than the big systems and appealing to a significant number of “decision-makers.”

3) **PQRS penalties will force more PTs to use an EMR.** In 2015, the reality of PQRS penalties will force more PTs to seek an EMR partner. It’s critical for practice prosperity that PTs choose the right one. Specifically, practices need to choose a partner who makes PQRS easier to navigate—not harder.

4) **ICD-10 will have less technical impact on physical therapy providers than FLR or PQRS—but will still impact cash flow.** In the coming year, ICD-10 will have less of a technical impact on PTs than other programs. That being said, ICD-10 will throw marginal payors into chaos, which will likely result in slower payments. Again, it’s important for PTs to choose the right partner on the EMR/practice management side and nail their billing and collections processes to ease the shift to ICD-10.

5) **Utilization management companies (ie, ASH) will face a rebellion from PTs and patients (and maybe even employers).** Providers are becoming savvy to the actual value (or lack of value) that utilization management companies present. This will drive providers out of network in 2015 and cause payors to look for a better solution for cost management.

6) **PTs will feel pressure to adopt standardized functional outcomes from a growing number of payors.** Outcomes measures from providers will eventually be required by a majority of decision-makers who are at financial risk. They will expect providers to share risk, manage that risk, and prove value.

Therefore, PTs need to master their clinical and financial outcomes data to negotiate future contracts. The questions become “What will be the outcomes tool?” and “What will the risk sharing look like?” Proactive physical therapy groups can guide those decisions and lead them. If PTs sit back and wait, others will make that decision for them, and they will be stuck with what makes sense to the others, not to them.

7) **Billing and revenue cycle management (RCM) will only get more complex to manage.** It must be done accurately, efficiently, and effectively. RCM is a tactical task—not strategic. Outsource it to the experts.

---

**Significant Events**

**September 2014:** Company paid back its loan and interest to WVJIT.

**December 2013:** Dynamic Physical Therapy increased their Line of Credit with Huntington Bank. The increase was due to a need to cover slow paying receivables. Huntington Bank has noted in the file, to review the relationship in an effort to refinance the WVJIT loan which matured in October 2014. WVJIT was not advised of any delinquencies.

**May 2013:** Dynamic Physical Therapy closed its Buckhannon location due to unfavorable patient demographics and insurance providers.

**Overall Conclusion**

Based on the foregoing, the WV Jobs Investment Trust finds it most appropriate to record its investment in Dynamic Physical Therapy, LLC at value, which is currently presumed to be the same as cost or \$0.

---





**Snapshot:**

Company: **Greenbrier Tech. Services, Inc.**  
Website: <http://www.greenbrier-tech.com/>  
Location: Ronceverte, WV  
Total Employees: FT/23; PT/3  
WV Employees: FT/23; PT/3  
  
WVJIT Investment: \$125,000  
WVJIT Ownership: 0%  
Subject to GASB 62: NO

**Leadership**

Joe McGraw, President/CEO  
Tawanna Martin, VP, CFO  
David Canter, VP of Sales and New Development

**Background**

Founded in 1989, Greenbrier Technical Services (GTS) provides engineering solutions to the banking, elevator equipment and mining industries. The Company has two major components: manufacturing and repair. GTS manufactures replacement parts, repairs printed circuit boards and modules, provides parts sourcing services, engineering and reverse engineering services. GTS has a flexible manufacturing facility capable of fulfilling orders in quantities from one to thousands. The Company is headquartered in Ronceverte, WV and currently employs 23 full-time and 3 part-time jobs.

**WVJIT Investment History**

- **May 2015**
  - \$250,000, 8% Convertible Note. The Convertible will be disbursed in two tranches upon meeting pre-determined milestones.
  - Warrant Coverage: 10% priced at \$.01 expiring in five years (April 2020).

**Total WVJIT Investment as of June 30, 2015: \$125,000 (\$125,000 funded through WVCAP)**

**Co-Investors**

Joesph and Susan McGraw  
Edward Knight  
Vissac, LLC  
Angus Peyton  
Bonnie Brae Farm, LLC

Patrick McGraw  
INNOVA Commercialization

**Management Team**

**Joe McGraw, President/Chief Executive Officer**

Joe McGraw began his career as a software engineer for Bendix Corporation, immersing himself in the development of microprocessor software and continuous analyzers to monitor the exposure of toxic substances and control gas chromatographs. He oversaw many projects related to those developments from research and development to execution. In 1983, Mr. McGraw recruited several engineers and raised approximately \$2M to establish Greenbrier Electronics to manufacture and develop the 4400 Portable Universal Tester (PUT) portable electronic tester to troubleshoot technical issues related to industrial electronics. In 1986, the assets were acquired by Temco Instruments, Inc. and Mr. McGraw held roles in Marketing, Sales, and Product Definition for Temco, where he participated in many trade shows and seminars showcasing the company's products to prospective end-market users.

In 1989, Mr. McGraw left Temco to start GTS where he currently serves as President/Chief Executive Officer for the company. Mr. McGraw is also 100% owner of Greenbrier River Trading company, which is a dormant company since 2011, and a 90% owner of Greenbrier Floor Care, LLC, which is a ServiceMaster Franchise run by his son, Jonathan McGraw. Mr. McGraw received his B.S. Magna Cum Laude in Electrical Engineering from WVU and M.S. in Electrical Engineering from Virginia Tech.

**David Canterbury, VP of Sales/New Product Development**

Mr. Canterbury started his career with Appalachian Electronic Instruments as a draftsman and later promoted to Head Mechanical Designer for textile defect detection equipment, where he worked closely with internal engineers to enhance the mechanical aspect of the design process. In 2003, Mr. Canterbury accepted a Mechanical Engineering role with GTS handling all engineering related responsibilities within the company and eventually promoted to Engineering Manager. During his initial role with GTS, the company's product line doubled.

After several years with an engineering role at America in Motion (AIM) in Charlotte, Mr. Canterbury returned to GTS in August 2010 where he currently serves as VP of Sales/New Product Development. Mr. Canterbury received his Associate of Science in Mechanical Engineering Technology from WVU of Technology and a B.S. in Mechanical Engineering from Kennedy Western University.

**Tawana Martin, VP/Chief Financial Officer**

Ms. Martin began her career with GTS in 1999 serving as the Marketing and Public Relations Director. In 2004, she was promoted to General Manager where she oversaw both business development as well as business operations. In 2009, Ms. Martin was promoted to VP and Chief Financial Officer, where she implements and defines the long/short-term company objectives, policy implementation, and strategic direction. Ms. Martin also administers the company budget and internal cost controls for the company.

Ms. Martin received her B.S. in Health Care Administration and Business Administration from the College of WV as well as an MBA from WVU concentrating in Management and Technology.

---



**Board of Directors**

**Guy Peduto, INNOVA Commercialization Group**

Guy Peduto joined the INNOVA Commercialization Group in April 2006. Prior to joining INNOVA, he held the position of Director, Commercial Programs at the Institute for Scientific Research, Inc. While there, he developed strategies for the commercial utilization of ISR's technology and research applications in such areas as biomedical research, education, software development, mining safety and communication, VTOL aerial vehicles, and automotive controls and diagnostics.

Mr. Peduto's background includes 20 years of strategic planning experience with an emphasis on product introduction, leadership for early stage and start-up companies as well as market and business development. This experience includes business formation, product development, go-to-market and market development strategies for industrial and commercial manufacturers, consumer goods, advanced research and development, healthcare, financial institutions, Internet start-ups and retail chains.

As a participant and contributor to West Virginia's technology-based economic development movement, Mr. Peduto serves on the Board of Directors of TechConnect and executive committee of TechConnect WV, as a member of the WV Angel Network working group, the West Virginia Development Office and the West Virginia Small Business Development Center's Advisory Board of Directors, the I-79 Development Council and West Virginia Biometrics Initiative.

Mr. Peduto received a Bachelor's degree in Business Administration with a major in Marketing from West Virginia University. In addition, he is a graduate of the Competitive Strategy program at the Kellogg School, Northwestern University, the Commercialization and Technology Transfer program at Carnegie Mellon University, the National Association of Seed and Venture Funds Professional Development Program and the Venture Capital Institute. He is also a member of the Leadership West Virginia Class of 2004.

**Michele O'Connor, West Virginia Jobs Investment Trust**

Michele O'Connor has more than 25 years of experience in the finance and banking industry. She attained her Certified Financial Planner designation along with the Accredited Investment Fiduciary Manager designation. She was the Portfolio Manager for the Trust Department at First United Bank and managed over \$600 million for the department. Currently, Ms. O'Connor is the Investment Manager for the West Virginia Jobs Investment Trust, a leading venture capital firm focused on turning the innovation of new ideas into successful world-class companies. Ms. O'Connor graduated Magna Cum Laude with a BA in Finance from the University of Maryland College.

**Joe McGraw, President/ CEO**

(See Bio Above)

**Product/Services**

GTS manufactures parts and components for companies within the defense/military, elevator/escalator, financial, HVAC, instrumentation, pharmacy, petroleum, mining, food service and vending. Examples of OEM replacement parts include the electronic components found in ATMs, freight elevators and industrial machinery. GTS has staff engineers and technicians to develop OEM microelectronic parts such as card readers, industrial printers, blower assemblies and printed circuit boards (PCBs) that are more durable and offer a longer useful life.

---





The second operating segment for GTS is in repair and support. Currently, the Company provides depot repair, electronic/electromechanical repair services, end of life machinery support services and other custom services. The Company commenced its penetration in the commercial food equipment market in 2013. Soon after forming relationships with notable restaurant operators and food equipment providers, the Company pursued and was later awarded the ISO 9001-2008 quality system management certification.

GTS prides itself on being the only ISO 9001-2008 certified commercial food service repair Company in the country. The ISO 9001 is a policy that assures proper and safe quality controls and tests those products upon its completion for accuracy and excellence. The management team stresses the importance of holding a high standard of quality and accountability on all its new and senior employees. Unlike its competitors, the Company's 14,000 square foot facility gives the capacity to handle both the repairing of circuit boards as well as the manufacturing of overlays and membrane switches typically used in commercial food equipment.

GTS utilized the funds it received from the Newtek loan to purchase additional equipment to expand its operating repair capacity. The picture below shows the before-and-after repair of malfunctioned and poorly maintained circuit boards for QSRs and commercial equipment companies. Turnaround time for the Company is usually two weeks upon receipt. The Company can minimize that time upon the hiring of additional employees.



GTS worked in conjunction with Stan Muschweck of StandOut Marketing and Advertising as well as Red House Consulting to develop a marketing plan to enter the Commercial Restaurant repair market. GTS team has attended numerous trade shows and conferences showcasing their solutions and services. Through this collaboration, the Company identified 15 initial prospective client targets and once funding is obtained, will pursue the larger accounts with restaurant chains such as McDonalds, Wendy's, Burger King, Taco Bell, and Ecolab. Given the large



number of locations of these restaurant chains, the projected market opportunity for equipment replacement and/or repair is over \$73M.

### Competition

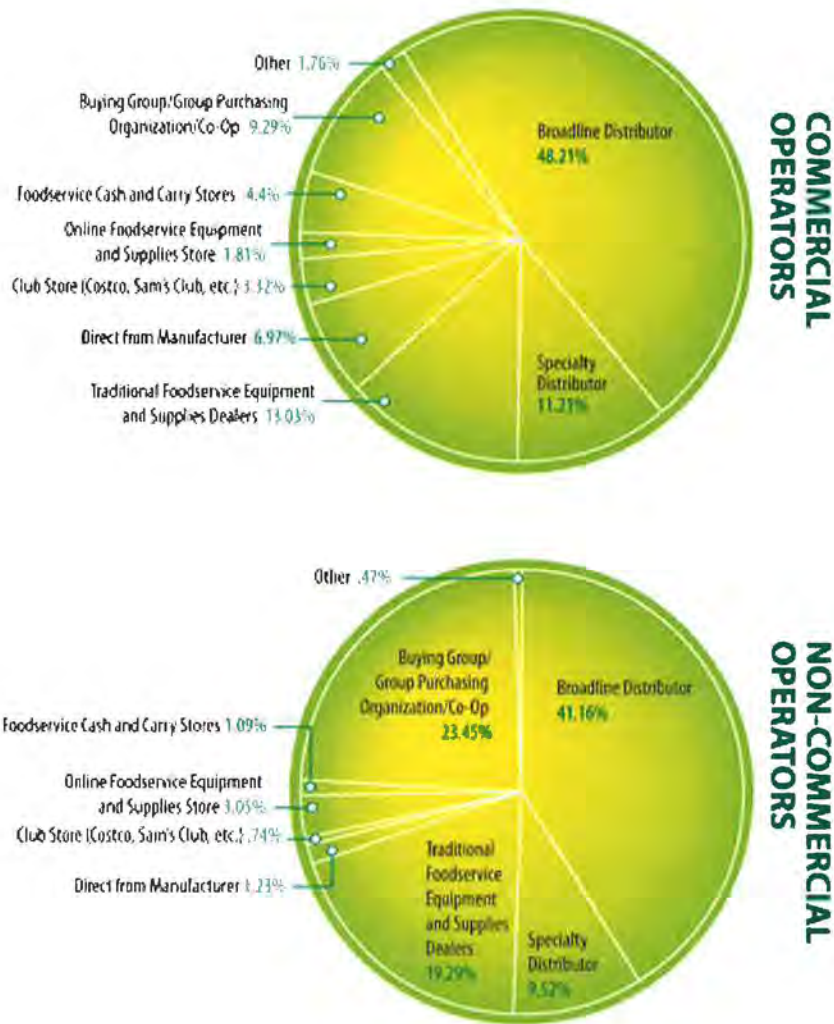
1. **Positran** – Norristown, PA
  - a. Full-Service Electronics Contract Manufacturer that specializes in printed circuit board assembly, cable and harness assembly, electro-mechanical assembly, and box build assembly.
  - b. Founded in 1989
  - c. Positran owns tooling for legacy Mosler and Lefebure parts, which allows them to provide parts that GTS does not have available.
2. **Audio Authority** – Lexington, KY
  - a. Specializing in audio/video solutions for the financial industry.
  - b. Founded in 1976
  - c. Company has shared design data with GTS to aid in repairs.
3. **Greyfield Industries** – Hamilton, OH
  - a. Manufacturer of drive-thru audio systems for the banking industry.
  - b. Founded in 1975
  - c. The company does not offer in-house repair services, the company receives the broken equipment and ships the repairs to finetech.
4. **Finetech** – Manchester, NH
  - a. Company is a repair service center for Greyfield Industries and for finance industry.
  - b. The company has multiple service locations both domestically and internationally.
  - c. Founded in 1992 in Berlin, Germany.
5. **Mevers Custom Electronics** – Olean, NY
  - a. Food Service repair company specializing in Point of Sale, Kitchen Equipment and Order Confirmation System repairs.
  - b. Works primarily with McDonalds in the Pittsburgh region.
  - c. Founded in 1994 and currently has less than 10 employees.
6. **Arapahoe Technologies** – Fort Collins, CO
  - a. Food Service Competitor that offers “low cost” replacement parts, but not repair services.
  - b. Customers mention company’s poor customer service quality.
  - c. Company has small market share.
7. **Monitor Enterprises** – Blaine, WA
  - a. Food Service Competitor that offers a large number of repairs to McDonald’s and restaurant equipment.
  - b. Founded in 1979.

### Industry/Market Summary

Today's foodservice operator faces no shortage of business pressures. Rising food costs remain a key pressure point for all operators. And the fact that foodservice sales are forecasted to grow anywhere from 3 percent to 3.6 percent in 2014, depending on which study you read, means the industry will likely remain in a take-share mode for the foreseeable future. That means foodservice operators will continue to carefully monitor their foodservice purchasing habits.

---

## Supplies Purchases by Channel



Increasing food costs represent our surveyed operators' most pressing business concern, as was the case three years ago. When looking at top concerns by market segment, though, some key differences begin to emerge. For example, beyond increasing food costs, food safety represents a significant business concern for non-commercial operators. In contrast, for commercial foodservice operators, a host of labor-related issues emerged as a top business concern. While commercial operators remain concerned about increased labor costs in general, their main challenges are in the areas of finding and training qualified employees and retaining their top performers. Labor has become such a concern, in fact, that it skipped past energy costs as a serious concern among commercial foodservice operators.



It comes as no surprise that anticipated labor pressures will have an effect on a foodservice operator's bottom line, rippling out to other aspects of the business. In fact, 80 percent of the operators surveyed reported they have changed their purchasing behaviors in the past year due to the business concerns outlined above. Along those lines, 41 percent of operators altered their approach to food purchases, 38 percent changed their approach to purchasing foodservice equipment and 34 percent say they altered their approach to procuring supplies.

## Do You Require Bids When Purchasing Foodservice Equipment?

	REPLACEMENT		REMODEL		NEW BUILD	
	Commercial	Non-Commercial	Commercial	Non-Commercial	Commercial	Non-Commercial
Always	33%	45%	48%	69%	60%	75%
Sometimes	48%	45%	36%	30%	26%	18%
Never	19%	10%	16%	1%	14%	7%

### Significant Events

**June 2015:** GTS closes on its loan from WVJIT and INNOVA to expand its commercial food equipment service repair segment.

### Overall Conclusion

Based on the foregoing, the WV Jobs Investment Trust finds it most appropriate to record its investment in Greenbrier Technical Services, Inc., at value, which is currently presumed to be the same as cost or **\$125,000**.



**Snapshot:**

Company: Liberty Hydro, Inc.  
Website: libertyhydro.com  
Location: South Charleston, WV  
Total Employees: FT/3; PT/0  
WV Employees: FT/3; PT/0

WVJIT Investment: \$425,000  
WVJIT Ownership: 35.9%  
Subject to GASB 62: YES

**Leadership**

Mark Kropilak, Chief Executive Officer  
Dr. John Taylor, Chief Technology Officer  
Phil Farina, Sales Executive

**Background**

Liberty Hydro, Inc. is a Delaware C Corporation formed in 2009 based on the application of technology developed by MATRIC that was engineered to remove selenium and other contaminants from coal mine discharge water. The Company also engaged in additional product developments, the most promising of which is an aspect of the ZVI technology that involves the brine concentrator, which is based on a new technology that the Company calls the CounterFlow ROTM Process. In addition, the Company has made progress on its pH Controller for acid mine drainage and its Dissolved Air Flootation (DAF) units.

Liberty Hydro has developed additional products for contaminant removal in water supply and has completed several case studies both domestically and internationally such as the John Amos Power Plant in West Virginia, the Ambatovy Mine in Madagascar and the Tannery Market in India.

The Company has several strategic partnerships with Meidlinger Partners, LLP, MATRIC and Merryweather Foam Inc., who is a distributor and fabricator of flexible foam products.

**WVJIT Investment History**

- **2011:**  
\$500,000 Series A-2 Preferred Units Investment.
  
  - **June 2012:**
    - \$100,000 Convertible Debenture; WVCAP; Maturity Date: June 30, 2016.
    - \$250,000 Convertible Debenture; WVCAP; 14% interest; Maturity Date: June 30, 2016
  
  - **July 2013:**
    - \$75,000 investment, convertible debenture, 10% interest rate
    - Maturity date: June 30, 2016/ Funded using WVCAP Seed Co-Investment Fund
-



**Warrant Coverage:**

75,000 shares of common equity at \$0.01 per share

• **February 2012:**

Exercised Warrants for 400,000 shares of common equity at \$0.01 per share.

• **October 2012**

Exercised Warrants for 1,050,000 shares of common equity at \$0.01 per share

**Total WVJIT Investment: \$425,000 (\$425,000 from WVCAP) Due to previous GASB adjustment**

**Valuation based on GASB 62: \$0.00**

**Equity Investment Balance: \$0.00**

**Accrued Interest Balance as of June 30, 2015: \$175,294.82**

**Co-Investors/Lenders**

Meidlinger Partners

Kennington

MAH

John Sawyer

Mark Kropilak

Marty Weirick

Vic Sprouse

Jon Pauley

Marc Weintraub

Germaine Kropilak

Robert & Carlene West

**Board of Directors**

**Mark Kropilak, Chief Executive Officer**

Mark Kropilak holds degrees in Economics and Accounting from Saint Vincent College, a JD from Columbia University and an Executive MBA from Villanova University and is a lecturer at their business school. He worked for Aqua America (a publicly-traded water utility holding company) for 23 years serving in various roles, including Senior VP of Corporate Development for the entire company and General Counsel for the regulated water and wastewater division. Mr. Kropilak was a consultant and one of Meidlinger Partners' part time Principals. He was on assignment to fill the CEO vacancy at Liberty and stabilize the Company, prior to becoming CEO at the end of March 2012.

---

**Karen Meidlinger, Meidlinger Partners**

Dr. Meidlinger is a Founder and Managing Principal of Meidlinger Partners, LLC. Based on her advanced scientific training, along with her ten years of experience sourcing deals, assessing technology and advising high growth companies, Dr. Meidlinger brings a strong and diverse skill set to Meidlinger Partners. She will share responsibility for all major functional operations of the firm, which include transaction sourcing, structuring, negotiating and divesting, working with Portfolio Companies and handling relationships with Limited Partners. Her deep innovation management and business development experience, combined with her passion for the development and protection of the planet's limited resources, brings a strong sustainable investment focus to Meidlinger Partners. Dr. Meidlinger received both her BSc and Ph.D. in the UK and her MBA from South Africa.

**Bill Goode, Representative of Mid-Atlantic Holdings**

Bill Goode currently occupies a Common Shareholder seat. He is Vice President for the Jacobs Financial Group of Charleston, WV where his primary responsibility is with two subsidiaries that specialize in underwriting surety bonds for regulated industries. The Jacobs Financial Group also includes Jacobs & Company, an SEC registered investment advisory firm. He previously served as President of the Charleston Area Alliance. Mr. Goode holds a BS in Accounting from the University of Kentucky.

**C. Andrew Zulauf, Executive Director, WV Jobs Investment Trust**

Andy Zulauf has extensive experience in finance and venture capital, having served as Executive Director and Senior Loan Officer for the West Virginia Capital Corporation, as a Partner and Managing Director of West Virginia operations for Adena Ventures, and as Vice President and Upper Middle Market Commercial Relationship Officer for Fifth Third Bank. Mr. Zulauf is a graduate of Marshall University and the University of Charleston's Executive MBA program.

**Products**

**ROVrTM**

Liberty has been working on several products over the past year. One of which is the Reverse Osmosis Vehicle for remediation, or ROVr.

ROVrTM is a platform treatment unit that can be customized for a customer's specific needs. It uses a combination of a Dissolved Air Flootation (DAF) and RO concentrator. The ROVr technology can be configured to work simultaneously with other treatment technology or can be a fixed plant design platform. The ROVr concentrator can reduce volume of reject water from standard RO technology by 50%, thus facilitating disposal and crystallization.

**pH2O Controller**

The pH2O Controller works very similarly to the way a thermostat does. The Controller automatically adjusts the chemical feed system to achieve the desired set point for the pH of a downstream flow. Liberty describes this product as perfect for acid mine drainage in a number of ways. Some of which are:

---



- Eliminates overfeeding (wasting chemicals)
- Eliminates underfeeding which can cause permit violations
- Ability to store data and read it remotely via satellite
- Liquid and Pellet Technology



### Zero Valent Iron Technology (ZVI)

This technology allows the selenium (and arsenic) to adhere to the media in the container units which thereby is removed. There are several industrial and rural applications for ZVI media such as being placed in large tanks and constructed drum systems. Additional market applications for the ZVI media include municipal systems, point-of-use devices, agriculture, and other areas of the development world. The media can effectively remove more than 90% of minerals such as selenium, mercury, thallium, lead, cadmium and chromium. In addition, the product is highly cost-effective relative to other products by competitors in the market.

The Selenium Remover system is a patent -pending system in which finely-divided zero-valent iron (ZVI) is attached to an open-pore polymer foam. The foam media allows easy flow of the water while enabling adequate contact and reaction time with the ZVI. The selenium in solution is reduced by the ZVI to elemental selenium which is permanently absorbed by the foam media.



### Competition/Market Summary

The overall global water treatment equipment market is estimated at \$35 billion in 2014 and is expected to grow at a CAGR of 7.4% till 2020. The major trend driving the Water treatment technologies market is rapid increase in populations both in developing countries as well as major urban centers.

Industrial water is the fastest growing sector of the global water market. This report is useful as each industry faces substantial challenges in their business, including tighter water quality standards, regulations on wastewater discharge, and pressure on scarce water resources. Water technology companies will find major opportunities in this market if they solve the problems of industrial water users with cost-effective, innovative solutions that improve efficiency.

There are many drivers for Water treatment technologies market the major one being the stringent government emission laws which allows the wastewater (sludge) from chemical plants and factories to be treated to an acceptable level, thereby increasing the use of Water treatment technologies. Economic development along with fast-paced urbanization especially in emerging countries is spurring this need for efficient water management solutions.

### Industry Summary

The new report, Global Residential Water Treatment Equipment Industry 2015-2019 says, many countries, such as the US, China, and those in the Middle East are developing standards and codes for water treatment to aid water conservation efforts. Some European countries have implemented advanced infrastructure, use sophisticated equipment for industrial water treatment, and are likely to invest in municipal water treatment equipment. This in turn is expected to result in higher demand for residential water treatment equipment in the next few years. The rapid expansion of human populations and the depletion of water resources are major factors driving the market.

---



The constantly diminishing water resources and a rising demand for potable water are major factors affecting global residential water treatment equipment market growth.

The analysts forecast global residential water treatment equipment market to grow at a CAGR of 12.57% over the period 2015-2019. According to the Global Residential Water Treatment Equipment Market 2015-2019 report, there is a growing demand for water treatment equipment owing to the rising contamination of natural resources. The contaminants present in various water sources include mud, silt, algae, and bacteria. The quality of freshwater resources is degrading due to the emission of harmful pollutants and effluents from industries. The contaminated drinking water leads to health hazards, propelling the demand for water treatment products and leading to market growth.

### **Significant Events**

**March 2015:** Regional energy company submitted an LOI to Liberty Hydro with contingencies to be met by Liberty. The Company continues to maintain its current projects and technology development.

**September 2014:** The Company continues to build its pipeline and has gathered interest from several companies. The pilot plant at John Amos is to proceed. It will be part of an EPRI contract extension. In addition, another pilot project is underway at Wateree, SC. The Company was also in discussions with a regional energy company to acquire Liberty.

**February 2014:** Liberty Hydro was awarded \$20,000 CAM Grant for a portable water-filtration pilot unit needed for customer-site demonstrations of Liberty Hydro's clean-water technology

**December 2013:** Company received a notice of allowance for the ZVI product/technology from the U.S. Patent and trademark office.

**July 2013:** WVJIT Board of Directors approved a \$75,000 convertible debenture investment in Liberty Hydro with a 10% interest rate. The Government Accounting Standards Board ("GASB") came out with a ruling in 2012 – GASB 62 – which requires state or federal venture capital funds that have 20% or more of the total voting stock in a portfolio to value its holdings according to the equity method.

This applied to Liberty Hydro, where WVJIT has 36% of the voting stock. Therefore, WVJIT recognized its proportionate share of operating losses of the Liberty Hydro and reflected the adjusted value on its internal and external financial statements.

**June 2013:** The Patent Security Agreement was amended. The Secured Creditors were given a security interest in any patents currently owned and any acquired in the future.

**June 2013:** ZVI Blue pilot unit installed at ATI and John Amos power plant in West Virginia arranged for a pilot unit to be installed. The Company also received a grant from CAM to build a trailer unit.

**December 2012:** Had a successful micro-pilot unit installed at Ambatovy mine in Madagascar.

**May 2012:** Liberty Hydro hired Mark Kröpilak as new CEO.

**2011:** Liberty and GE were joint testing to determine the increased viability of both processes when coupled together. The Company developed new technology addressing the water contamination issues resulting from the

---



**WV JOBS INVESTMENT TRUST BOARD  
ANNUAL INVESTMENT ANALYSES  
JUNE 30, 2015**

“fracking” process for natural gas production. The prototype was successfully tested in a controlled environment and to be field tested in the 4th quarter of 2011.

**Overall Conclusion**

Based on the foregoing, the WV Jobs Investment Trust finds it most appropriate to record its investment in Liberty Hydro, Inc., at value, which is currently presumed to be the same as cost or **\$425,000**. This investment and loan balance reflects the GASB 62 adjustment.

---



**Snapshot:**

Company: **MATRIC**  
Website: [Matricinnovates.com](http://Matricinnovates.com)  
Location: South Charleston, WV  
Total Employees: FT/45; PT/44  
WV Employees: FT/43; PT/36

**WVJIT Investment Balance: \$1,625,000**  
**WVJIT Ownership: 0.0%**  
**Subject to GASB 62: NO**

**Leadership**

Steve Hedrick, President and CEO  
Greg Clutter, Chief Operating Officer/Interim-CFO  
Dr. Parvez Wadia, Vice President & Chief Technical Officer  
Jane Copely, VP Operations/ HR  
Mark Dehlin, VP Advanced Engineering Systems  
Dr. Ian Burdett, Director of Energy Products  
Dr. Duane Dombek, Director of Process and Product R&D  
Dr. John Sawyer, Director of Environmental Projects  
Dr. George Keller, Director Chief Engineer  
Dr. Jack Dever, Director of Process Engineering/Development

**Background**

MATRIC is a West Virginia non-profit organization headquartered in South Charleston, West Virginia. MATRIC has three wholly owned subsidiaries performing various services. Mid-Atlantic Commercial Research, LLC (MCR), which provides for-profit commercial R&D; Mid-Atlantic Technical Engineering, LLC, which is a full service professional engineering firm; and, Mid-Atlantic Technical Consulting, LLC, (MATC). MATRIC also has a majority interest in Mid-Atlantic Holding, Inc. (MAH) which holds and commercializes the intellectual property portfolio of MATRIC through licensing and the creation of technology-based companies.

MATRIC is focused on conducting life-changing research and development and commercializing related products and services. MATRIC currently employs over 40 people, a bulk of whom have doctorates in the fields of science and technology. MATRIC's scientific staff performs research and development in chemical and environmental technologies, advanced engineering and health and life sciences.

MATRIC develops its own intellectual property through internally funded research as well as pre-negotiates "field of use" agreements with customers to allow MATRIC to advance discoveries in domains that are not of interest to the customer organization and further exploring commercialization opportunities.

---



MATRIC is managed by individuals with extensive research and development experience. MATRIC is headquartered within a 650-acre site that includes research and development buildings, engineering buildings, a data center, and laboratories that house other companies such as Dow Chemical, Bayer, and the laboratories of West Virginia State University. The location and experience of the Company's scientists and engineers provide a substantial long term-term competitive advantage.

#### **Investment/Loan History**

The Legislature authorized \$2 million in funds to be made available to MATRIC. It was determined that the most appropriate method to invest those funds was through WVJIT. WVJIT negotiated with MATRIC a transaction whereby WVJIT would loan \$2 million to MATRIC. In turn, WVJIT secured its loan with accounts receivable, inventory, fixtures and equipment. In addition, WVJIT secured its loan with "reserved" shares in MAH. WVJIT has the option to convert its loan into shares of MAH. If the full loan proceeds were converted at WVJIT's option, it would convert to 20,000 or 20% of MAH. If MATRIC is unable to meet its debt obligations then WVJIT, in a default circumstance, may convert its loan in up to 40,000 shares of common stock, or 40%. MAH is currently authorized to issue up to 100,000 shares and initially issued all 100,000 shares to MATRIC. MATRIC has previously sold 1,000 shares to American Electric Power; 5,000 shares to the Clay Foundation; and 2,000 shares were issued to the Charleston Area Alliance in exchange for previously issued debt.

#### **May 2009:**

- Convertible Loan: \$2,000,000
- Current Loan Balance: \$1,625,000

#### **Warrant Coverage:**

None

**FY2015 WVJIT Interest Received: \$53,445.20**

#### **Board of Directors**

##### **Gregory Babe, Chairman**

Liquid X Printed Materials

##### **Stephen A. Kawash, Treasurer**

Gibbons & Kawash

##### **William B. Goode**

Jacobs Financial Group, Inc.

##### **Dr. George Keller**

MATRIC, Chief Engineer

##### **Kevin DiGregorio**

Chemical Alliance Zone

##### **Joe W. Gollehon**

TSG Solutions

##### **Tom Potter, Past Chairman**

Jackson Kelly, PLLC

##### **Greg Clutter**

MATRIC, COO/Interim-CFO

##### **John Miesner**

MATRIC, General Counsel

##### **Bob Welty**

Fifth Third Bank

##### **Paul Gray**

MD, PMG Consulting

##### **Parvez Wadia**

MATRIC, CTO



**Thomas A. Heywood**  
Bowles Rice, LLP  
(retired)

**L. Newton Thomas Jr.**  
ITT Carbon Industries, SVP

### Products

MATRIC offers research and development support and services in the following specialties: Chemical Process Technologies, Technical Engineering, and Software Technologies.

**Chemical Process Technologies:** Provides R&D support as well as Catalysis, Scale-up and Technology Verification, Solids Processing, Green Technologies, Techno-Economic Assessments and Emerging Technology Evaluations, Safety Engineering Services, Environmental Services, and other strategic programs.

**Technical Engineering:** Provides mechanical, civil, electrical engineering, instrumentation control systems design and programming personnel, as well as other project services areas of expertise including: project management, detailed engineering, procurement and operations training. The staff specializes in Natural Gas, Water, and Chemical Industry.

**Advanced Software Technologies:** Provides customers with unique offerings such as GIS Applications, Modeling Simulation, Software Engineering and Development Servers to specifically meet their needs to their market offerings.

### Competition/Market Summary

MATRIC was formed back in 2002, following the release of more than 150 world-class researchers and scientists after the Dow Chemical-Union Carbide merger. Perhaps the closest resemblance that MATRIC will have to another organization is that of the Research Triangle Institute (RTI) located in Research Triangle Park, North Carolina.

There are certainly some overlaps in the areas of research both institutions cover such as health and life sciences, software technology development and energy research. It is also worth mentioning that both organizations have great standing relationships with its respective universities. What's different between the two organizations, aside from size and history, is the level of research that RTI has done on global pediatric and geriatric health issues. Much of the focus tends to be on the medical side of their research and development. However, given the growth that MATRIC has had since its inception and their focus on chemical and environmental technologies, it leaves little doubt on their ability to grow and expand their operations serving West Virginia and the surrounding areas.



### Industry Summary

For the 2014 Global Innovation 1000 study, Innovation Excellence looked ahead to the next decade, asking our survey respondents how they expect their innovation practices to evolve. The rate of growth in innovation expenditures for the Global Innovation 1000 slowed sharply in 2014 to just 1.4 percent—the slowest rate of growth in the past 10 years for the 1,000 global companies that spent the most on R&D. (R&D spending declined only once during this time period: in 2010, in the wake of the financial crisis and recession, and then only modestly.)

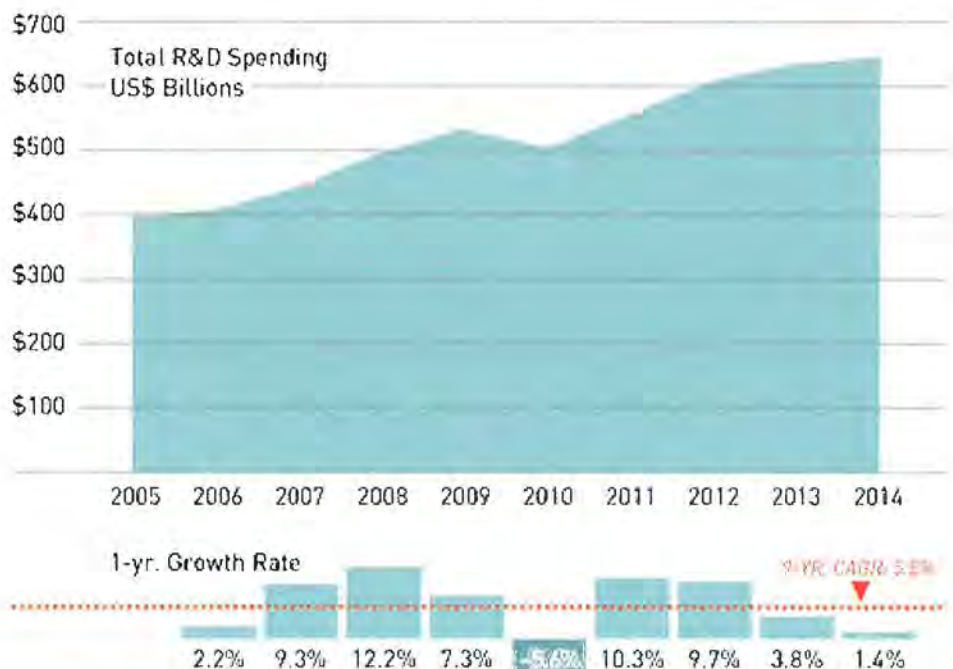
---



The last two years of decelerating growth—3.8 percent growth in 2013 and 1.4 percent in 2014—could be attributed to the general mood of uncertainty overhanging today’s global economy or the unusual amount of geopolitical turmoil in the world. Looking at 10 years of data, however, suggests another simpler explanation: reversion to the mean. The slowdown followed two years of above-average growth in 2011 (10.3 percent) and 2012 (9.7 percent), and R&D spending growth will likely move closer over time to the average 5.5 percent compound annual growth rate from 2005 to 2014. It also may be that innovation spending slows about five years after a market disruption. After all, the next-lowest year of R&D spending growth was in 2006, five years after the 2001 dot-com bubble burst (*see Exhibit 1*).

### Exhibit 1: R&D Spending Growth, 2005–14

With one exception, each year of the Global Innovation 1000 study has witnessed an increase in R&D investment.



Source: Bloomberg data, Capital IQ data, Strategy& analysis

The study found that the Global Innovation 1000 companies have some common expectations and goals, and that there is some convergence around areas where they hope to improve their innovation performance. Participants believe that aligning business and innovation strategies will be the most important driver for innovation success. Interestingly, this and other key areas are the same ones that Need Seekers are already focused on today (*see Exhibit 3*).

**Exhibit 3: The Key Areas of Innovation Focus**

Survey respondents across all three innovation models report similar areas of focus for their R&D programs over the next 10 years – and most are areas on which Need Seekers have already been focused.

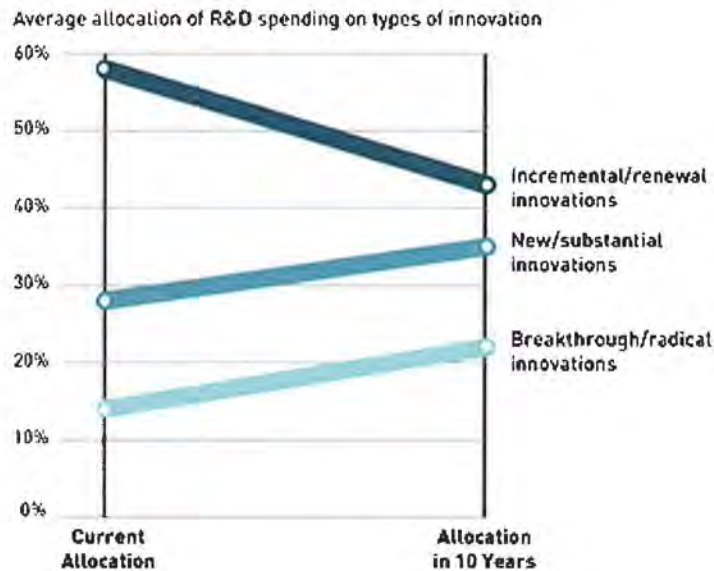


Source: Strategy& 2014 Global Innovation 1000 survey data and analysis

All respondents report that they plan to shift their current R&D spending mix from incremental innovations to more new and breakthrough innovations. Today, 58 percent of R&D spending is directed at incremental or renewal innovations, just 28 percent at new or substantial innovations, and only 14 percent at breakthrough or radical innovations. In 10 years, respondents expect the picture will look quite different (see Exhibit 4).

**Exhibit 4: Future R&D Investment**

Survey respondents expect to shift their R&D investment mix from incremental to new and breakthrough innovations.



Source: Strategy& 2014 Global Innovation 1000 survey data and analysis



### Significant Events

**May 2015** : MATRIC Representatives met with Congressmen David McKinley to discuss the progress and efforts going on at MATRIC. MATRIC will be featured in an article with WV Living Magazine.

**December 2014**: The MATRIC management team presented its 2015 budget to the MATRIC board which was approved.

**April 2014**: Chemical Alliance Zone will be launching Chemception, the nation's only incubator focused solely on commercializing chemistry-based technologies and helping entrepreneurs, start-ups, and small companies launch their businesses. MATRIC is a strategic partner for the incubator and hopes to attract entrepreneurs in starting their chemistry-based businesses in Charleston. Tenants already include Liberty Hydro and Polyplexx, LLC.

**February 2014**: MATRIC announced Gregory S. Babe has replaced Paul E. Arbogast as Chairman of the Board of Directors. Mr. Babe brings more than 30 years of experience in the chemical and manufacturing industries.

**November 2013**: Charleston Area Alliance announced MATRIC to be the recipient of the "Forward to the Future" award. The award is presented monthly to a business, individual, or community group, whose innovative work is propelling the Alliance's vision 2030 plan forward.

**February 2013**: Steven Hedrick joins MATRIC as President and CEO.

**August 2012**: Board of Directors approved a motion to enter into a \$350K 60 month-term loan at a rate not greater than 4.75% for the purchase of boilers for the pilot plant activities. MAH fully divested from Europa ownership with project final expense approximating \$143,500. Expense treated as a note from MAH to MATRIC and as 2013 WVJIT seed fund obligation payment.

**July 2012**: MATRIC executives authorized the dissolving of a European subsidiary, MATRIC Europa, at a cost of €68,500 which translates to about \$84,000.

**June 2012**: President and CEO of MATRIC, Keith Pauley, resigned from his position to take a job overseas with ChemChina. Greg Clutter is named interim-CEO.

**June 2011**: MATRIC constructed its first large pilot plant for a mid-size industrial company. MATRIC saw increased interest from Chinese companies in the coal and chemical industries for research projects. Domestically, the Company engaged in discussions with companies in the energy and chemical business.

**June 2009**: During the 2008 West Virginia Legislative session, specific funds were allocated for furthering research and commercialization efforts at MATRIC. Those efforts were greatly enhanced by the additional hiring of scientists and professionals following the announced workforce reduction by Dow that took place in 2009.

---

**Overall Conclusion**

Based on the foregoing, WV Jobs Investment Trust finds it most appropriate to record its investment in MATRIC, Inc. at value, which is currently presumed to be the same as cost or **\$1,625,000**.

---





**Snapshot:**

Company: **MightyTykes, LLC**  
Website: mightytykes.com  
Location: Berkeley Springs, WV  
Total Employees: FT/1; PT/2  
WV Employees: FT/1; PT/2

**WVJIT Investment: \$100,000**  
**WVJIT Ownership: 0.0%**  
**Subject to GASB 62: NO**

**Leadership**

**Isabella Yosucio, President**

**Background**

Poor muscle tone (hypotonia) or muscle weakness are impairments common to several physical conditions found in children, including Down Syndrome, prematurity, Autism-spectrum disorders, Cerebral Palsy and Muscular Dystrophy. These physical limitations impair a child's timely mobility and the ability to fully explore their environment and in turn, learn and socialize. With input from parents, physical therapists and occupational therapists from some of the nation's leading children's hospitals, Down Syndrome mom Isabella Yosucio developed Mighty Tykes™ Infant and Child Weights to meet this important unmet need. MightyTykes, LLC estimates that nearly three million children from birth to age five in the United States alone are affected by these conditions, many of which are on the rise. Worldwide, the incidence and prevalence of these conditions is comparable.

Carefully and thoroughly researched, Mighty Tykes™ weights are designed to be visually aesthetic, affordable, user-friendly and easy to manufacture. They are made in the USA from high quality materials, meeting the high standards of institutional settings, while still being affordable to parents, caregivers and independent therapists in a home setting.

For children with Down Syndrome, a weight training program using ankle weights in progressive resistance exercises for lower limbs and balance training is an effective treatment to improve strength and balance. In addition, children with certain conditions may also have other impediments that can be effectively treated by ankle or wrist weights including tremors, poor coordination, or simple sensory issues. According to the Company and INNOVA's research, there is currently not a wrist or ankle weight designed for the early intervention market, and the Company's product— Mighty Tykes™ Infant and Child Weights—fills that gap.

**WVJIT Investment History**

- **March 2014**
  - \$100,000 - 9% Convertible Note accruing 9%. The Convertible Note will be disbursed in two tranches upon meeting pre-determined milestones.
  - No Warrant Coverage

**Total WVJIT Investment as of June 30, 2015: \$100,000 (\$50,000 funded through WVCAP)**

**FY2015 Interest Revenue: \$7,028.08**

**Co-Investors/Lenders:**

Isabella Yosuico  
Raymond Yosuico

**Products and Services**

MightyTykes, LLC, based on feedback, is developing a  $\frac{3}{4}$  and 1lb weight. Due to the cost savings recognized during Phase 1, this will be a cost-neutral expansion.



**Board of Directors**

**Guy Peduto, INNOVA Commercialization Group**

Guy Peduto joined the INNOVA Commercialization Group in April 2006. Prior to joining INNOVA, he held the position of Director, Commercial Programs at the Institute for Scientific Research, Inc. While there, he developed strategies for the commercial utilization of ISR's technology and research applications in such areas as biomedical research, education, software development, mining safety and communication, VTOL aerial vehicles, and automotive controls and diagnostics.

Mr. Peduto's background includes 20 years of strategic planning experience with an emphasis on product introduction, leadership for early stage and start-up companies as well as market and business development. This experience includes business formation, product development, go-to-market and market development strategies for industrial and commercial manufacturers, consumer goods, advanced research and development, healthcare, financial institutions, Internet start-ups and retail chains.

As a participant and contributor to West Virginia's technology-based economic development movement, Mr. Peduto serves on the Board of Directors of TechConnect and executive committee of TechConnect WV, as a member of the WV Angel Network working group, the West Virginia Development Office and the West Virginia Small Business Development Center's Advisory Board of Directors, the I-79 Development Council and West Virginia Biometrics Initiative.



Mr. Peduto received a Bachelor's degree in Business Administration with a major in Marketing from West Virginia University. In addition, he is a graduate of the Competitive Strategy program at the Kellogg School, Northwestern University, the Commercialization and Technology Transfer program at Carnegie Mellon University, the National Association of Seed and Venture Funds Professional Development Program and the Venture Capital Institute. He is also a member of the Leadership West Virginia Class of 2004.

**Michele O'Connor, West Virginia Jobs Investment Trust**

Michele O'Connor has more than 25 years of experience in the finance and banking industry. She attained her Certified Financial Planner designation along with the Accredited Investment Fiduciary Manager designation. She was the Portfolio Manager for the Trust Department at First United Bank and managed over \$600 million for the department. Currently, Ms. O'Connor is the Investment Manager for the West Virginia Jobs Investment Trust, a leading venture capital firm focused on turning the innovation of new ideas into successful world-class companies. Ms. O'Connor graduated Magna Cum Laude with a BA in Finance from the University of Maryland College.

**Isabella Yosucio, Founder**

Isabella Yosucio is the mother of six-year-old Pierce and three-year-old Isaac, who has Down Syndrome. Isabella is an accomplished communications professional with an extensive background in healthcare-related marketing and communications in a variety of settings including Fortune 1000 healthcare companies, hospital systems, biotech companies, management consulting firms and non-profits. At different times in her career, Isabella has also played a key role in organizational development and administration. Isabella is currently a communications consultant for MedImmune, Inc. and Bon Secours Health System, and is also pursuing an M.S. in Management (emphasis on Public Relations) at the University of Maryland University College, where she previously completed a B.A. in Communications Studies. As part of her master's curriculum, Isabella completed a Financial Decision Making for Managers course and will begin a Statistics for Managerial Decision Making in this fall semester.

**Dario Campolattaro, CEO, Kelly [Health] Insurance Agency Summit Insurance Group**

Dario Campolattaro has more than 20 years of experience in the health insurance industry. A dynamic, results-oriented leader, Mr. Campolattaro has a strong track record of performance in sales, turnaround and high-paced organizations. Mr. Campolattaro is an accomplished business and community leader who has served on boards including Loudoun (Virginia) CEO Cabinet, Greater Washington Boys and Girls Clubs, and is the former Board President for the Society for Human Resource Management. Mr. Campolattaro is an accomplished athlete, who has completed the Marine Corps Marathon three times along with several marathons, 50-mile, Ironman and related competitions.

**Industry/Market Overview**

World Down Syndrome Day is celebrated globally every March to raise awareness about the genetic disorder that affects approximately 1 in 700 babies born in the United States each year. To honor this day, the APTA has created resources for parents of children with Down syndrome (DS), explaining the importance of physical therapy in facilitating their child's growth and development to enable them to function at their best throughout all the stages of life.

"Low muscle tone, decreased strength, increased movement at the joints, poor balance, posture difficulties, feeding problems, and poor hand use often delay natural development in children with DS," explained APTA member and

---



board-certified pediatric physical therapist Venita Lovelace-Chandler, PT, PhD, PCS. On Move Forward Radio APTA hosted the segment, "Down Syndrome and the Role of Physical Therapy." Lovelace-Chandler discussed how physical therapists help children with DS develop gross motor skills in order to achieve important developmental milestones. These skills can include, but are not limited to, head control, sitting, crawling, postural control, standing, and walking.

Treatment for DS is still evolving, but recent research suggests that strength, balance, and cognitive function are three factors that influence physical development. While the abilities of children with DS can differ vastly in these areas, Lovelace-Chandler says that physical therapists play a key role in helping children develop strength and balance, adding, "the earlier your child begins physical therapy, the better the outcomes."

In later childhood and early adulthood, people with DS may develop other conditions such as obesity, poor cardiovascular health, thyroid dysfunction, skin disorders, depression, and difficulty learning tasks that require more complex movement. Physical therapists are able to work with the family and other health care providers to reduce or prevent these conditions.

#### **Market for DNA Sequencing-based Downs Syndrome Tests**

The New England Journal of Medicine published a study showing that a new, DNA sequencing-based blood test provides a dramatic improvement in accuracy at screening for Down Syndrome and a second, deadly disorder. That could open up a \$6 billion market to the biotechnology companies that are already marketing these tests.

Each year in the U.S. there are 6.6 million pregnancies and 4 million births, according the Centers for Disease Control and Prevention. The list prices of the tests, which are sold by four different companies, range from \$700 to \$2,500. Assuming that pricing settles in the middle of that range and that there are 5 million women who choose to have the test, that would be an \$8 billion market.

#### **Significant Events**

**June 2015:** MightyTykes has used all of its cash and is currently exploring potential investment options with a WWSBDC coach. As such the Company has stopped all new paid marketing campaigns until the cash flow situation can be addressed.

**March 2015:** Company received funding from INNOVA to solicit consultants for marketing and social media campaigns. The Company updated its products on Amazon to offer free shipping. With the change, the Company tripled its sales. Comparing May, June and July of 2014 with the first quarter of 2015, the Company sold 175 units versus 358 respectively.

**December 2014:** The Company received its second disbursement of funding.

**September 2014:** Company reviewed SEO campaign by marketing consultant as well as potential application to "Shark Tank." WVJIT finalized the second tranche distribution and loan modification. The Company, based on feedback, was developing a ¾ and 1lb weight. Sales doubled as of September 2014 and the Company continued to push with an aggressive marketing campaign and approved the Phase 2 textile and manufacturing prototype.

**June 2014:** MightyTykes products were sold directly through its website as well as Amazon.com and another separate distributor. The Company completed most of Phase 1 of production and began the process of Phase 2. A

---



significant cost savings was created during Phase 1, which helped offset any unexpected costs which the Company may encounter during Phase 2.

**May 2014:** MightyTykes was featured in the WV State Journal. The Company also received a \$3K in grant funding from TechConnect to attend the New York Metro Abilities EXPO.

**March 2014:** WVJIT Board of Directors approved a \$100,000 convertible debenture investment in MightyTykes.

#### **Conclusion**

Based on the foregoing, the WV Jobs Investment Trust finds it most appropriate to record its investment in Mighty Tykes, LLC at value, which is currently presumed to be the same as cost or **\$100,000**.

---



## **MOUNTAINEER TROUT FARM, LLC**

### **Snapshot:**

Company: **Mountaineer Trout Farm, LLC**  
Website: N/A  
Location: Josephine, WV  
Total Employees: FT/3; PT/0  
WV Employees: FT/3; PT/0

**WVJIT Investment: N/A**  
**WVJIT Ownership: 0.0%**  
**Subject to GASB 62: NO**

### **Leadership**

**S.E. Thompson, Owner**  
**Colleen Miller, Owner**  
**Tom Ort, Advisor**

### **Background**

Mountaineer Trout Farm, LLC is an aquaculture business formed in March 2007 as a joint partnership run by the late Ted Miller of Birch Creek Deer Farms located in Pennsylvania and S.E. Thompson, Jr., of Gainesville, Florida. Operations are located at the Lillybrook Aquafarm site located in Josephine, West Virginia. The site uses water from the former Lillybrook Mine. The water is ideal in temperature, chemistry, and is free of water-borne disease. The site is gravity-fed, thus eliminating redundant pumping systems, which significantly reduces operating costs and gives the Company a major cost advantage. Mountaineer Trout Farm leases the property by Lillybrook Mine and pays a leasehold payment based on a percentage of gross sales. The lease began after the assets reverted back to WVJIT in 2007.

Mountaineer Trout Farm was formed to take advantage of a natural resource – mine water used to supply an aquaculture project. The Company now has two parallel raceways each measuring 100 feet by 20 feet width. The raceways were constructed with Company funds and borrowed funds from Farm Credit. The raceways are estimated to have a maximum capacity of 400,000 in future years. The lease gives Mountaineer Trout Farm the right of first refusal on any future lease for the McAlpin Farm site.

The project was initially funded as Minaqua in 1995 with the goal of becoming a major supplier of Arctic Char to the Mid-Atlantic and South Central regions of the United States. At the date of the formation of Mountaineer Trout Farm, WVJIT has a depreciated value of \$573,387 to its lease household interest in the facility which in turn is subleased to Mountaineer Trout. WVJIT also wrote off the 2007 investment in Mountaineer Trout Farm.



### WVJIT Investment History

- **2007:**
  - \$1,573,794 Debt Investment
  - \$ 280,000 Equity Investment
  - Royalty: 5% on gross sales

**FY2015 WVJIT Revenue: \$39,466.06**

### Board of Directors/ Management

**Wesley Grose – Plant/Farm Manager**

**Paul Rowe - Plant/Farm Assistant Manager**

### Products

Mountaineer Trout sells a variety of trout on their trout farm in Josephine, WV. During the past year, no new products or services were created by Mountaineer Trout. Their continued growth and sales numbers continue to retain unprecedented status and Mountaineer Trout will continue on their same path as their future looks bright.

### Competition/Market Summary

The Global Aquaculture market is expected to grow at a CAGR of 6.83% and 3.10% in terms of revenue and volume, respectively, during the period 2014-2019.

Aquaculture is the breeding, rearing, and harvesting of aquatic organisms under controlled conditions. It includes fishes, aquatic plants, mollusks, and crustaceans. The primary function of aquaculture is to produce seafood. It uses a host of techniques and technologies to rear aquatic plants and animals. Apart from producing seafood, it also helps restore the population and habitat of aquatic organisms, and increase the population of wild fish. It can be carried out in either a natural or a man-made environment. Aquaculture is one of the fastest growing food production sectors in the modern world.

One major trend emerging in the market is the use of sustainable practices that are more efficient and productive. Environmental concerns and awareness about the consequences of certain fishing techniques is driving the adoption of sustainable aquaculture practices. Players in the market are focusing on all aspects of aquaculture production, from the use of quality inputs to the efficient use of land, water, and energy resources.

### Industry Summary

The UK's Centre for Environment, Fisheries and Aquaculture Science (Cefas) is developing cutting edge farmer-led disease diagnostics technology that could help combat devastating disease outbreaks in global fish and shellfish production, saving up to \$6 billion lost annually across the global aquaculture industry.

---



Cefas is working with governments and industry in the UK and Asia to develop new DNA-based diagnostic technology linked to data reporting by smartphone, which can be used by local farmers at the “pond side” to rapidly detect potentially devastating diseases, such as White Spot Syndrome Virus (WSSV).

Cefas is leading field trials in Thailand, where diseases like WSSV and other emergent problems such ‘Early Mortality Syndrome’ have led to a halving of annual yield and profit (amounting to \$2B) from the shrimp industry.

It is hoped that this revolutionary approach will help ensure that early detection enables faster management of infection and disease and more effective control of outbreaks, which in the past have led to serious impact on food supply and a loss of profits for the poorest rural communities engaged in farming. According to Cefas, developing new approaches to safeguarding food security will be increasingly important, with the global population projected to increase by two billion by 2050 and consumption of seafood in Asia alone projected to increase by 50%.

### **Significant Events**

**December 2014:** During 2014, Mountaineer Trout Farm sold 400,599 pounds of rainbow trout with the overall production cost remaining constant at \$1.42 per pound. These costs are expected to increase during 2015. The lease payment percentage reverted back to the original 5%. The Company plans to expand its production capabilities during the Spring/Summer of 2015, maybe looking for funding for the project.

**June 2014:** Mountaineer Trout Farms requested the lease be amended to reflect the 3% royalty lease payment which it has been sending in lieu of the 5% royalty lease payment. Also, the Company planned to add two new raceways and requested a \$35,000 loan to cover the costs of the expansion.

**April 2013:** Mountaineer Trout Farm planned to upgrade the property by installing a new roof to the feed room and various other leasehold improvements.

**June 2011:** Over the past ten months Mountaineer Trout Farm caught up on the royalty payments that were in sums unpaid by as much as \$31,000 in September 2010. As of the end of June, the Company was current in its royalty obligation. Current royalty payments were based on 5% (3.75% to WVJIT/ 1.25% to Piney Land Company) of fish sales. Following several discussions and predicated on the royalty payments being brought current, the Company and WVJIT started negotiating a new royalty rate, which would allow the Company to capture funds to meet their debt obligations for the construction of raceways. A new proposal was sent to the Company; however, there was not an agreement finalized.

**February 2011:** WVJIT received an insurance settlement from the WV Board of Risk & Insurance for the collapse of the main structure at the McAlpin Farm site, which was under option to Mountaineer Trout. The loss of the structure would have minimal effect on the interest of Mountaineer Trout in exercising their option on the McAlpin site.

**June 2010:** Mountaineer Trout was delinquent on its obligated royalty payments to WVJIT for 2009 and 2010.

**2008:** WVJIT agreed to collect 5% of the “gate price” of the fish sold. Gate price is the selling price of live fish when they are transported from the fish farm. Sales may be made for stocking purposes or processed for consumption. The percentage is applied to sales resulting from an arms-length transaction. Any sales made to close associates, family, or otherwise at a favorable price not consistent with market prices, is based on an assumed sales price of \$1.40 per pound. WVJIT in turn, pays a royalty of 1.25% to the landowner, Piney Land.

---



**2007:** Mountaineer Trout Farm, LLC was formed and entered into a sub-lease agreement with WVJIT for a period of 30 years with two ten-year renewal periods.

**Conclusion**

Based on the foregoing, the WV Jobs Investment Trust finds it most appropriate to record its investment in Mountaineer Trout Farm, LLC at value, which is currently presumed to be the same as cost or **\$148,027** which is the net asset value of the property.

---



Company: **PolyPlexx, LLC**  
Website: PolyPlexx.biz  
Location: South Charleston, WV  
Total Employees: FT/2; PT/2  
WV Employees: FT/2; PT/2

**WVJIT Investment: \$271,560**  
**WVJIT Ownership: 11.37%**  
**Subject to GASB 62: NO**

### Leadership

**Jon C. Pauley, President/Chief Commercialization Officer**  
**Dr. Edmond J. Derderian, Chief Technology Officer**  
**Dr. Richard M. Gerkin, Sr. Technical Advisor**

### Company

Formerly known as Transparent Armor, LLC (a MATRIC spin-off), it was renamed as PolyPlexx, LLC in 2005. The Company was founded by former Union Carbide scientists: Jon C. Pauley, Edmond J. Derderian, and Richard Gerkin. Scientists are developing new chemistry for making high-performance polyurethane and/or urethane hybrid polymers which are easier to process relative to the existing polymers such as polycarbonate. In addition, these polymers are well-known for their extremely broad formulation latitude and can be designed to meet a wide variety of application needs in industries such as Ophthalmic, Safety, and Defense. The Company is located at the Research Technology Park in South Charleston, WV.

### Investment History

- **May 2014**
  - \$271,560 Series C Equity Investment. (Funded through WVCAP).
  - No Warrant Coverage

### Co-Investors/ Lenders in Series C Round

Crimson Hill  
INNOVA Commercialization Group

### Management Team

#### Jon C. Pauley, President and Chief Commercialization Officer

Jon Pauley's responsibilities focus on leading the commercialization efforts of the organization. Mr. Pauley also provides the interface between commercial activities and the Research and Development activities. He received B.S. degrees in Biology and Chemistry from West Virginia State College in 1983 and has spent the largest portion of his career working as a small business start-up specialist.

---



**Dr. Edmond J. Derderian, Chief Technology Officer**

Dr. Derderian is responsible for the definition of the R&D program and its technical focus. He received an A.B. degree in Chemistry from Colby College (Waterville, Maine) in 1966 and a Ph.D. in Chemistry from Pennsylvania State University in 1974. After two years as a Post-Doctoral Fellow in the Ames Laboratory at Iowa State University, Dr. Derderian joined Union Carbide Corporation at the South Charleston Technical Center in 1976. He continued in research and development activities for OSi Specialties, Witco, and Crompton Corporation, attaining the position of Senior Research Scientist/Global Technology Manager.

Dr. Derderian's responsibilities over his career have included new product and process development, global technology management, and new business development. His technical expertise includes polyurethane technology, structure-property relationships of polymers, fuel and lubricating oil additives, micro emulsions, and interfacial chemistry and physics. He has numerous publications and patents.

**Dr. Richard M. Gerkin, Sr. Technical Adviser**

Dr. Gerkin is the co-inventor (with Dr. Derderian) of the technology. Dr. Gerkin received a Ph.D. in Chemistry from the University of California at Santa Barbara in 1968 and a B.S. in Chemistry from Wheeling Jesuit College in 1965. He began his technical career in industrial research with Union Carbide Corporation at the South Charleston Technical Center in 1969. His work continued with OSi Specialties when it was spun off from Union Carbide in 1993, and with the successor companies Witco Corporation and Crompton Corporation. He retired in June of 2002 as a Corporate Research Fellow.

Dr. Gerkin's technical focus throughout his career has been in the development of new products for use in polyurethane systems, including polyols, catalysts and silicone surfactants. He has authored numerous technical papers and holds 22 patents.

**Board of Directors**

Tim Appleberry	Crimson Hill, LLC
Jon Pauley	PolyPlexx
Doug Malcolm	Board Member
Eric Nelson Jr.	Nelson Enterprises
Michele O'Connor	WVJIT
Dr. Richard Gerkin	Polyplexx
Tim Fogarty	Crimson Hill, LLC

**Products**

Viziplexx is a developed and patented net urethane-based technology platform that provides industries with new high-performance optical/impact resistant materials.

PolyPlexx has developed and patented three products through the technology platform. Primary business model will be through licensing the technologies with private and public entities and institutions.

---



<u>Patent/Trademark</u>	<u>U.S. Patent Number/Serial Number</u>	<u>Issue Date</u>	<u>European/World Patent Number</u>
Impact Resistance Polyurethanes	US8178644 B2	February 2012	EP22227500 B1, WO2009088456A2
Transparent Polyurethanes	US8372939 B1	February 2013	International patents to be filed.
Viziplexx (Safety & Security)	8584788	February 2013	N/A
Viziplexx (Ophthalmic Lens)	77652104	January 2009	N/A



### Competition

<u>Company</u>	<u>Public/Private</u>	<u>Location</u>	<u>Most Recent Revenue</u>
Chemtura Corp.	Public (NYSE: CHMT)	Philadelphia, PA	\$438M (3/31/15)
PPG Industries	Public (NYSE: PPG)	Pittsburgh, PA	\$3.66B (3/31/15)
Dow Chemical	Public (NYSE: DOW)	Midland, MI	\$12.4B (3/31/15)

### Market Summary

The global market for eyeglasses is projected to reach \$113.2 billion by 2018. Growth in the market will be driven by shifting fashion preferences of customers towards trendy and sporty eyeglass frames to create a style statement. Eyeglasses have today shed their utilitarian image of being just a vision correction contraption to become a key fashion accessory. Innovative materials for lenses and frames and other technological advances have resulted in several new designs with better aesthetic appeal, style and quality. Eyeglasses with lightweight material frames such as monel and titanium with polycarbonate lenses have become immensely popular in recent years. Currently in vogue are frames with brighter, bolder, multi colors, and with rectangular shapes. The trend mirrors a move away from the rimless frames of circle and oval shapes. Also being preferred are frames made from natural materials. Frames with crocodile patterns and animal skin prints are finding favor among nature enthusiasts.

### Ophthalmic Instrumentation

The global market for ophthalmic instrumentation is projected to exceed \$2.9 billion by 2018. Development of technologies such as digital photography, scanning laser ophthalmoscopy (SLO), spectral domain optical coherence tomography have aided ophthalmologists in having a better understanding of diseases in the posterior segment of the eye. At present, the demand is centered on imaging technologies that offer wider visual access of retinal periphery beyond the typical 30°-100° frame. Demand for optical coherence tomographers is growing at a rapid pace as the device is capable of imaging the vascular structure under the retina and has higher resolution capabilities.

In the ophthalmic surgical devices market, potential in the refractive laser surgery segment is set to be more with efforts directed towards faster recovery times and low risk of complications. Latest ophthalmic devices such as accommodative lenses, LASIK and implantable retinal prosthetics are currently replacing the extensively used traditional treatment methods. A noteworthy technology in refractive error correction area in recent times is femtosecond laser platform for LASIK which facilitates creation of safer and more precise flaps. The advent of this



next generation technology is expected to revolutionize cataract surgery procedure, bringing in the shift from conventional hand-held blade to blade-free lasers.

Consolidation in the eye care industry highlights the trend towards vertical and horizontal integration at manufacturing, distribution, and managed care levels. One of the major factors driving consolidation trend is mounting price competitiveness. Key players profiled in the report include Abbott Medical Optics, Inc., Alcon, Inc., Bausch & Lomb, Inc., Carl Zeiss Meditec AG, Ellex Medical Lasers Limited, Iridex Corp., Lumenis Ltd., Nidek Co. Ltd., Topcon Corp., and Topcon Medical Systems, Inc.

### **Industry Summary**

The global ophthalmic devices industry is anticipated to grow from an estimated USD \$29,171.5 million in 2014 to USD \$42,685.1 million in 2020 at a CAGR of 6.5% during the forecast period.

Globally, the ophthalmic devices market is witnessing significant growth due to increasing prevalence of eye disorders, such as diabetic retinopathy and macular degeneration. In addition, growing global aging population, increasing government initiatives towards healthcare infrastructure in developing countries, and increasing incidence of lifestyle-associated diseases are also driving the growth of the market. However, lack of awareness among people about eye disorders, poor primary healthcare infrastructure, and lack of insurance in developing countries hamper growth of the global ophthalmic devices market. In addition, eye diseases in children are also increasing due to the general lack of awareness.

North America is the largest market for global ophthalmic devices. Vision care devices are the most used type of ophthalmic devices, spectacles lenses are the most used type of vision care ophthalmic device and cataract surgery devices are the most popular type of ophthalmic surgical device. In terms of growth, Asia is the fastest growing region; ophthalmic surgical devices make for the fastest growing type of devices, while contact lenses make for the fastest growing type of vision care ophthalmic devices.

The North American market is anticipated to grow from an estimated USD \$11,450.6 million in 2014 to USD \$16,242.8 million in 2020, growing at a CAGR of 6% during the forecast period.

### **Significant Events**

**June 2015:** Jon Pauley provided the Board updates relating to the business development evaluations with major companies PolyPlexx has been in negotiations with for the past few months. PolyPlexx has also gained the interest of a potential outside investment as well.

**December 2014:** Company was working with Crimson Hill and INNOVA to transfer financials to an accounting firm and were working with the South Charleston Technology Park to secure a build out to begin manufacturing.

**September 2014:** The Company satisfied the requirements for the third closing of the Series C round. WVJIT and INNOVA finalized the documents to close and disburse.

**June 2014:** PolyPlexx updated their Board on recent developments surrounding ViziPlexx I and ViziPlexx II Formulation, laboratory operations, and its opportunities with several Japanese companies

**April 2014:** PolyPlexx closes Series C investment Round.

---

**WV JOBS INVESTMENT TRUST BOARD  
ANNUAL INVESTMENT ANALYSES  
JUNE 30, 2015**

**December 2013:** WVJIT Board of Directors approves \$271,500 Series C investment in PolyPlexx, LLC.

**Conclusion**

Based on the foregoing, the WV Jobs Investment Trust finds it most appropriate to record its investment in PolyPlexx, LLC at value, which is currently presumed to be the same as cost or **\$271,560**.

---





### Leadership

**Steve Turner, Chairman & CEO**  
**Danille Dunn, CFO**  
**Stan Hostler, Vice President/Secretary**  
**Matthew Powell, Chief Science Officer/ Head of R&D**  
**Gregory W. Kilby, Ph.D., Chief Bioanalytics Officer**

### Snapshot:

Company: **Protea BioSciences Inc.**  
Website: proteabio.com  
Location: Morgantown, WV  
Total Employees: FT/39; PT/1  
WV Employees: FT/39; PT/1

**WVJIT Investment: \$3,583,438**  
**WVJIT Ownership: 3.18%**  
**Subject to GASB 62: NO**

### Background

Protea Biosciences, Inc., located in Morgantown, West Virginia, began as a Delaware corporation in July 2001, and has become an emerging biotechnology Company. Protea is engaged in developing and commercializing proprietary life science technologies, products and services that are used to recover and identify proteins in biological samples.

Protea applies its expertise to the development of products, instruments and services that seek to improve the discovery and identification of proteins, metabolites and other biomolecules. The Company's products and services are purchased primarily by pharmaceutical and academic/clinical research laboratories. Protea's commercial focus is on its LAESI Instrument platform and proprietary software. The focus remains on either the sale of the LAESI Instrument to the end user or providing access to the LAESI technology through a services unit lab recently opened.

The LAESI unit allows the researcher to study the biochemical landscape of a sample without destroying the sample. The sample is studied in its natural form.

In addition, the Company offers an expanding line of consumable products that are used in bio-analytical mass spectrometry. These consumable products include Progenta surfactants that can rapidly remove proteins out of samples to prepare them for analysis by mass spectrometry; single use products including pipette tips; and, an extensive line of protein mass spectrometry standards.

### WVJIT Investment History

- September 2011
  - Outstanding Convertible Debt Converted
- January 2012
  - \$100,000 investment in Common Stock. Funded through WVCAP.

**WV JOBS INVESTMENT TRUST BOARD  
ANNUAL INVESTMENT ANALYSES  
JUNE 30, 2015**

- **March 2012**
  - \$290,000 Convertible Debenture, 6% monthly payment maturing 8/29/14. Loan has been extended to 12/31/15.
- **April 2012:**
  - \$400,000 Convertible Debenture (\$200,000 was funded through WVCAP), 10% Interest, monthly payments maturing 5/15/13. The maturity date was extended to 12/31/15.

**Warrants/Warrant Coverage**

<b>Date Issued</b>	<b>Expiration Date</b>	<b>Type</b>	<b>Price</b>
10/30/2009	10/30/2019	Common	TBD
10/30/2009	10/30/2019	Common	TBD
5/31/2011	5/31/2016	Common	\$2.00
1/31/2012	1/31/2017	Common	\$2.25
3/15/2012	3/15/2017	Common	\$2.25
4/18/2012	4/18/2017	Common	\$2.25

**Total WVJIT Investment: \$3,583,438 (\$200,000 Funded from WVCAP)**

**WVJIT FY2015 Revenue: \$53, 850.00**

**Total Outside Investment: \$65,728,925 (Paid-in Capital – Common Stock)**

**Sales and Issuances of Securities**

- As of May 13, 2015 the Company has 109,109,233 shares of common stock outstanding.

**Management Team**

**Stephen Turner, Chief Executive Officer and Chairman of the Board**

Mr. Turner has held executive positions since founding Protea in July, 2001. From 1999 to 2001, he served as President and CEO of Quorum Sciences, Inc. From 1984 to 1997 he was President and CEO of Oncor, Inc. He founded Bethesda Research Laboratories, Inc. in 1975 and served as its Chairman and CEO from 1975 to 1983, at which time BRL became the molecular biology division of Life Technologies, Inc. Prior to commencing his career in biotechnology, Mr. Turner held the position of Director of Marketing for the Clinical Microbiology Division of Becton, Dickinson & Co. He received his B.A. from Stanford University in 1967. In 1994 he received the Ernst & Young Entrepreneur of the Year Award in Life Sciences for the Washington D.C. Region.



**Matthew Powell, Ph.D. Research & Development and Chief Science Officer.**

Dr. Powell received his Ph.D. in Analytical Chemistry from West Virginia University in 2005. Dr. Powell's expertise is in the field of biological mass spectrometry and is a co-inventor of certain technologies developed by Protea. Dr. Powell has presented several scientific talks and seminars to international audiences; most recently, as a guest lecturer for AnalytiX 2013 in Suzhou, China.

**Greg W. Kilby, Ph.D., Chief Bioanalytics Officer.**

Dr. Kilby has over 18 years of experience in applying advanced biological mass spectrometry to areas of research including structural biology, protein characterization, and proteomics to support drug discovery and development and to support the sales of liquid chromatography mass spectrometry (LCMS) analytical equipment into the life sciences, government, academic, and applied markets in the Americas. Prior to joining Protea, Dr. Kilby held a position in Thermo Fisher Scientific of Director, North America Life Sciences Mass Spectrometry Application and Demonstration Laboratories, leading a team responsible for providing product demonstrations and application services to support quota performance and business growth of the Thermo Scientific life sciences mass spectrometry portfolio in North America. Before joining Thermo Fisher Scientific in 2012, Dr. Kilby held several positions in Agilent Technologies, starting as a senior Proteomics and BioPharma applications scientist as well as being responsible for developing and implementing two state of the art Demonstration Centers of Excellences (COE) in Wilmington DE and Santa Clara CA, showcasing Agilent's entire breadth of analytical technologies portfolio. In 2007, Dr. Kilby moved to a management position within Agilent responsible for managing the two COE facilities and two satellite laboratories across North America and the respective mass spectrometry applications scientist, administrative and logistics staff. Prior to his work at Agilent, Dr. Kilby held, from 1998 to 2004, several senior positions in the Discovery Technologies Department with Pfizer Global Research & Development, culminating in Research Associate, responsible for leading a team of scientists to provide advanced mass spectrometry support for structural biology and therapeutic area projects and as part of Pfizer's global proteomics center of emphasis (COE). Dr. Kilby received his Ph.D. in Analytical Chemistry from the University of Wollongong, Australia in 1996.

**Board of Directors**

**Stephen Turner, CEO and Chairman of the Board of Directors**

(See Management Team)

**Stan Hostler, Vice President and Secretary**

Stan Hostler has been the Director of Protea since January 2006 and Vice President and Secretary since June 2006. He is an attorney with a career practice in the field of labor and employment law. From 2000 to 2010 he served as Special Assistant to the Governor of the State of West Virginia. From 2002 to 2004 he served as Counsel to Prim Law Firm. From 2000 to 2010 he served on the West Virginia University Foundation Board of Directors and from 1995 to 2010 on the Advisory Committee of the WVU School of Medicine. He is a graduate of West Virginia University School of Law (1965). Mr. Hostler was appointed to serve based on his legal experience and business contacts and relationships with WVU and the State of West Virginia, which has proven to be an asset to the Company.

---



**Leonard Harris**

Leonard Harris has been on Protea's Board of Directors since April 2003. Since 1977, he has been the founder and CEO of Southern Computer Consultants, Inc., located in Frederick, Maryland. This company provides products and services to the United States government and Fortune 500 corporations. Mr. Harris was appointed to serve based on his extensive experience in technology-based corporate development.

**Ed Roberson**

Ed Roberson has been on Protea's Board of Directors since September 2009. From July 2006 to June 2010, Mr. Roberson served as Chairman of the Board of Directors of Methodist Healthcare System. He received his MBA in accounting in 1972 from the University of Georgia. From 2006 to 2011 he was President of Beacon Financial, in Memphis, Tennessee, and from 2006 to 2007 he was President of Conwood, LLC. He has been a Director of Paragon National Bank from 2004 to present. From 1972 to 1992, Mr. Roberson was employed by KPMG, most recently as a partner. Mr. Roberson was asked to serve based on his experience with KPMG, as a partner and then CEO.

**Scott Segal**

Scott Segal has been on Protea's Board of Directors since February 2008. Mr. Segal is a practicing attorney, specializing in the fields of personal injury, product liability and related matters, and is the President of the Segal Law Firm in Charleston, West Virginia. He received his JD from the West Virginia University School of Law in 1981, and has been a member of the American Bar Association since that date. Mr. Segal was asked to serve based on his relationships within the State of West Virginia, and is considered, by the Company, to be an expert in several areas, including forensics and occupational health.

**Maged Shenouda**

Mr. Shenouda has over 25 years of experience in the pharmaceutical and securities industries. Most recently, Mr. Shenouda was the Head of Business Development and Licensing at Retrophin, Inc. Prior to that, he served as the Head of East Coast Operations at Blueprint Life Science Group, a strategic investor relations consultancy. Mr. Shenouda spent the bulk of his career as an equity analyst with senior level positions at Stifel Nicolaus, UBS and JP Morgan, covering a broad range of small and large cap biotechnology companies. Mr. Shenouda started his sell-side career with Citigroup and Bear Stearns where his coverage universe focused on U.S and European pharmaceutical companies. Before entering Wall Street, Mr. Shenouda was a management consultant with PricewaterhouseCoopers' Pharmaceutical Consulting practice and also spent time in pharmaceutical sales, having worked as a hospital representative and managed care specialist for Abbott Laboratories' Pharmaceutical Products Division. Mr. Shenouda earned a B.S. in pharmacy from St. John's University and is a registered pharmacist in New Jersey and California. He also received an M.B.A. from Rutgers University Graduate School of Management.

**Patrick Gallagher, CFA**

Mr. Gallagher is an accomplished Capital Markets executive, advisor and investor with a distinguished record of success in both the public and private markets with a focus on healthcare, agriculture and industrials. He has over two decades of experience on Wall Street and extensive experience in alternative investments, research and marketing. He is a Managing Director and Head of Institutional Sales for Laidlaw & Company (UK) Ltd., a healthcare focused investment bank. Mr. Gallagher co-founded Black Diamond Research, LLC ("BDR"), an

---



independent sell-side research firm specializing in healthcare and industrial investing, financing and operations, serving the institutional investing community at large. As Chief Executive Officer of BDR, Mr. Gallagher oversaw institutional research and sales. Prior, he held various sales positions at Kidder Peabody, PaineWebber, New Vernon Associates and Concept Capital. Mr. Gallagher served as VP of Business Development and Investor Relations as well as a strategic consultant for Kinex Pharmaceuticals, a biotechnology firm focused on next-generation therapies in oncology and immunology. He also serves as an advisor to CHD Biosciences, a novel antimicrobial company. Mr. Gallagher sits on the board of directors for BioSig Technologies, Inc., a medical technology company that is developing a proprietary platform in the electrophysiology space. Mr. Gallagher received his B.S. from the University of Vermont, his M.B.A. from Pennsylvania State University and is a CFA charter holder.

### **Josiah T. Austin**

Josiah Austin has been on Protea's Board of Directors since 2013. Mr. Austin serves as the managing member of El Coronado Holdings, LLC. He and his family own and operate agricultural properties in the states of Arizona, Montana, and northern Sonora, Mexico through El Coronado Ranch & Cattle Company, LLC and other entities. Mr. Austin previously served on the Board of Directors of New York Bancorp, Inc. and North Fork Bancorporation. He has served as Director of Goodrich Petroleum, Inc. since April 2002 and Novogen Limited since September 2010. Mr. Austin serves as trustee of the Cuenca Los Ojos Foundation Trust. Mr. Austin graduated from the University of Denver with a Bachelor of Science in Finance in 1971.

### **Products/Services**

Protea's principal product is a bio-analytical instrument platform known as, "LAESI" (laser ablation electrospray ionization). This technology enables the direct identification of proteins, lipids and metabolites in tissue, cells and bio-fluids, such as serum and urine, without any sample preparation prior to analysis. LAESI is intended to meet the broad need of the biologist for the direct, unbiased identification and characterization of biomolecules in biological samples, which can remain untouched prior to their analysis.



The Company also has a bio-analytical services unit that specializes in services including biomarker discovery, absolute quantitation of large molecules, MRM-based assays, and global proteome characterization. In March 2012, the Company expanded its facility into an 11,000 square foot state-of-the-art facility. In October 2012, Protea opened a mass spectrometry imaging center, which offers access to the most advanced bio-molecular imaging capabilities including ultra-high resolution mass spectrometry coupled with Protea's LAESI Platform.

In June 2014, Protea announced it would be expanding its existing mass spectrometry based molecular imaging by offering Ion Mobility on a Waters Synapt® G2S High Definition mass spectrometer as a powerful extension to Protea's portfolio of mass spectrometry based molecular imaging services. In addition, the Company would also offer High Resolution and Accurate Mass analysis as well as a service to enhance the ability for rapid processing of microbial samples with the LAESI DP-1000 system, coupled with new software that enables the processing of large, complex LAESI-MS data files with downstream statistics programs, provided by Gubbs, Inc.



### Competition/Market Summary

- Life Technologies (Carlsbad, CA) – Life Technologies is a publicly traded company and a broad-based supplier of products for protein research.
- Advion (Ithaca, NY) – Advion is a private company, a supplier of mass spectrometry-related instrumentation.
- Bruker Corporation (Billerica, MA) – Publicly traded company focused on mass spectrometry and magnetic resonance technology. The company has strong business focus on molecular mapping done with mass spectrometry.
- JEOL Ltd (Tokyo, Japan) – Public company that developed mass spectrometry systems for direct analysis of samples.
- Prosolia (Indianapolis, IN) – Private Company and a supplier of mass spectrometry-related instrumentation.

### Industry Summary

The global molecular diagnostics market will reach \$7,956.9 million by 2018, growing at a CAGR of 9.7% during the forecast period (2013-2018).

From an insight perspective, this research report focuses on the qualitative data; market size, share, and growth of various segments and sub-segments; competitive landscape; and, company profiles. The qualitative data covers various levels of industry analysis, such as market dynamics (drivers, restraints, opportunities and threats) and technological trends, globally. It also focuses on the emerging and high-growth segments of the molecular diagnostics market and the initiatives of their respective governments.

Molecular diagnostics (MDx) has emerged as one of the largest and fastest growing segments in the In Vitro Diagnostic (IVD) industry. In the span of few years, molecular diagnostics has prospered from a non-existent market to a significant market. PCR tests such as the one from Roche for CT/NG and other tests such as HIV qualitative and HIV quantitative (viral load) are the key factors driving the expansion of the molecular diagnostics market. The private reference laboratories developed tests for infectious diseases and cancer mutations due to the rising incidences and the non-availability of FDA approved assays. The market began to expand due to the existence of different diagnostic kits for genetic diseases and the blood screening for various infectious diseases. The demand for molecular testing increased and the FDA approved molecular diagnostic tests for determining genetic variation responses against cancer drugs. As a result, molecular diagnostic testing is growing at a rapid rate due to the rising adoption of rapid and quick diagnosis.

The reagents product segment accounted for the largest share of the total molecular diagnostics market in 2013 and will continue to grow in the next five years to retain its leading position. The high growth in this segment is attributed to the growing demand for molecular assays. Moreover, the rising incidences of infectious diseases such as HBV, HIV, CT/NG, and MRSA have also contributed to the largest share of the reagents market. The hospitals end user segment accounted for the second largest share in 2013. This segment can monitor various physiological parameters of a patient in order to have an overview of the patients health and status. Due to the tremendous increase in the number of infectious diseases, hospitals are increasing their investments in molecular diagnostic testing.

---



The PCR technology segment, on the other hand, will be the fastest growing segment in the coming years due to the evolution in technology that helps in diagnosis of various diseases. With the growing incidences and increasing awareness of various diseases this market is set to grow at a faster pace. Under this segment, the INAAT segment is also expected to grow at a higher pace in the forecast period. The microarray technology is also expected to be among the fastest growing in all other segments of the molecular diagnostics market.

In 2013, North America accounted for the largest share and will retain its leading position by 2018. This growth is attributed to the increasing prevalence of lifestyle diseases and spread of various contagious diseases. Asia is the most lucrative region for molecular diagnostics in the next five years, and is poised to grow at a CAGR of 12.2% in the forecast period. The high population base and the improved purchasing power of patients will drive this market. Moreover, the economic crisis in western countries has propelled the companies to focus on the Asian region, thus leading to the economic growth and rise in the investments in this region, which is further driving the market in a positive direction.

Asia is the most promising region for molecular diagnostics in the coming five years. It is expected to grow at a higher CAGR than North America and Europe over the forecast period. The high population base and improved purchasing power of patients are the major drivers of this market. Moreover, the economic instability in the western countries enables companies to focus on the Asian region in order to meet their revenue targets.

The grey area while estimating the market size was the overlapping nature of the applications segment and while segregating them based on the evaluation of endpoints involved. This was later clarified with the help of various experts that participated in the study.

The competitive landscape covers the growth strategies adopted by the industry players in the last three years. The company profiles comprises of the basic views on the key players in the molecular diagnostics market and their product portfolios, developments, and strategies adopted to maintain and increase their market share in the near future.

The key players in the molecular diagnostics market are Roche Diagnostics (Switzerland), Gen-Probe (Hologic) (U.S.), QIAGEN (Netherlands), Becton, Dickinson & Company (U.S.), Siemens Healthcare (Germany), bioMérieux (France), Abbott Laboratories (U.S.), Novartis AG (Switzerland), Cepheid (U.S.), and Beckman Coulter (U.S.).

#### **Significant Events**

**May 2015:** Steven O' Loughlin resigned as VP, Corporate Finance.

**April 2015:** Maged Shenouda and Patrick Gallagher were appointed to the Board of Directors, replacing Andy Zulauf and Thjis Spoor. In addition, Protea entered into an employment agreement with Stephen Turner for a three year term.

**March 2015:** Protea entered into a share repurchase agreement to acquire VivoPharm Pty. Ltd., an Australian company. The purchase price for the shares is \$11,153,000.

**January 2015:** The Company announced it has developed a new software platform called the "Histology Guided Mass Spec Imaging (HG-MSI)" which enables pathologists to combine traditional microscopy and histology with high resolution mass spectrometry molecular imaging.

---



**December 2014:** A loan modification agreement was submitted to Protea for signature to extend the loans to December 2015.

**June 2014:** Protea announced that it will be expanding its existing mass spectrometry based molecular imaging by offering Ion Mobility on a Waters Synapt® G2S High Definition mass spectrometer as a powerful extension to Protea's portfolio of mass spectrometry based molecular imaging services. In addition, the Company would also offer High Resolution and Accurate Mass analysis as well as a service to enhance the ability for rapid processing of microbial samples with the LAESI DP-1000 system, coupled with new software that enables the processing of large, complex LAESI-MS data files with downstream statistics programs, provided by Gubbs, Inc.

**May 2014:** Protea announces that it has received approval from the Depository Trust Corporation (DTC), providing the Company with DTC eligibility, permitting stockholders to hold Company securities in electronic form on the books of its transfer agent. In addition, the Depository Trust Corporation (DTC) has approved its common stock for DWAC/FAST transfer through Island Stock Transfer, the Company's transfer agent.

**April 2014:** Greg Kilby, Ph.D. has joined Protea as its Chief Bio-analytics Officer (CBO) and Director of Bio-molecular Information Services.

**March 2014:** Protea entered into an Option Agreement among ProteaBio Europe and BioPharma d'Azur, Inc. in which BioPharma was granted a 90 day option to acquire the business of Protea Europe in exchange for a non-refundable fee of \$300,000. BioPharma was to provide evidence of raising an additional \$300,000.

**January 2014:** Protea announced that it is a part of a team led by George Washington University (GWU) that has been awarded up to \$14.6 million for a cooperative agreement spanning five years from the Defense Advanced Research Projects Agency (DARPA).

**September 2013:** University of Oklahoma's Institute for Natural Products Applications and Research Technologies (INPART) acquired the LAESI DP1000 bio-molecular imaging system. The instrument will be used for the Institute's natural products-based drug discovery operations. It entered into a Collaborative Research Agreement with Virginia Commonwealth University ("VCU") and its Center for Molecular Imaging. Focusing on the combination of LAESI, Protea's ex vivo molecular imaging mass spectrometry technology platform, with VCU's in vivo molecular PET, SPECT and MRI/MRS imaging capabilities, in hopes of developing new methods to better elucidate the molecular basis of cancer, Alzheimer's and other human disease.

The Company planned on marketing and selling additional LAESI units to pharmaceuticals as well as educational institutions throughout North America in the fourth quarter as well as 1Q14. The Company does have a LAESI backlog for 1Q14, with pending LAESI sales with Dow Agrosiences, George Washington University, Monsanto and University of Prince Edward Island.

**July 2013:** Protea received issuance of two patents. The first patent is titled "Laser Ablation Electrospray Ionization (LAESI) for Atmospheric Pressure, In Vivo, and Imaging Mass Spectrometry" (U.S. Patent #8,487,244) and the second patent is titled "Three-Dimensional Molecular Imaging By Infrared Laser Ablation Electrospray Ionization Mass Spectrometry" (U.S. Patent # 8,487,246).

**March 2013:** LAESI production started. Two units were completed. Four additional units were in production. The first unit shipped in March.

---



**February 2013:** Protea adds Thijs Spoor and Josiah T. Austin to its Board of Directors.

**January 2013:** Daniel Flynn resigned as Board Director of the Company.

**November 2012:** Protea enters into a Patent License Agreement with George Washington University.

**June 2012:** Protea Biosciences LAESI DP-1000 product received an R&D 100 Award and was recognized as one of the most technologically significant products for the year.

**June 2012:** The LAESI instrument was showcased at Analytical in Munich (April) and at the American Society of Mass Spectrometry (ASMS) Conference in Vancouver (May). Protea noted at their June 1<sup>st</sup> Board of Directors meeting that there was interest and contact from between 15-18 dealers after these conferences.

**May 2012:** The Lipase Valuation Report was published by Protea with the end of Phase I being valued at \$64 Million.

**March 2012:** Protea received the PittCon Editors' 2012 Bronze Award for their new LAESI DP-1000 Instrument.

**September 2012:** Protea completed a reverse merger and became a publically reporting company.

**January 2012:** Awarded by "The Scientist" publication as a "Top Ten" Technology Award for 2011 for their LAESI-1000 Instrument. Protea expanded to a new facility. WVJIT used money to fund the leasehold improvement. Also, a second WVCAP program participant used funds for the purchase of a mass spectrometer for the facility.

**February 2011:** Protea began collaboration with WVU Cancer Center on various research projects.

**December 2010:** ProteaBio Europe SAS (a wholly owned subsidiary) successfully completed Phase I/II human clinical trials for the MS18189 recombinant biopharmaceutical for the treatment of pancreatic disease which ProteaBio had been co-developing with Mayoly-Spindler. Protea has exclusive North American marketing rights to the product.

**June 2010:** Protea announced the formation of the French subsidiary, which completed a clinical trial for their recombinant lipase therapeutic, which they were developing in partnership with Maylor-Spindler, the European pharmaceutical company. Under terms of partnership agreement, Protea receives from Maylor-Spindler the exclusive marketing rights for the recombinant lipase in North America. This first clinical trial required a significant amount of resources to put in place the regulatory infrastructure that is necessary for a company to engage in clinical trials and submit data for FDA approval.

**July 2009:** The WVJIT Board of Directors approved a 7-year, \$1.2 million convertible note with 6% interest only in the first 2 years. At year three, the note would be amortized and WVJIT would begin receiving P&I payments. Additionally, as part of the closing, WVJIT was to receive 50% warrant coverage for Class A common shares exercisable at \$2 per share with a five-year term.

**June 2009:** Protea completed a work plan for the construction of a medical instrument furthering the technology known as Laser Ablation Electrospray Ionization (LAESI). The prototype was developed at George Washington University and will enable the use of a laser to ionize materials for a mass spectrometer analysis, thus preserving the sample in place without destruction.

---

**May 2009:** Protea announced a partnership with French based Mayoly-Spindler, which specializes in Gastroenterology therapeutics. Mayoly has developed a recombinant Lipase, an enzyme for the treatment of exocrine pancreatic insufficiency (EPI). According to a press release, Protea would receive the exclusive marketing rights for the Lipase for North America.

**June 2008:** Protea raised \$2,874,829 in equity in the previous 12 months, bringing the Company's total paid in capital amount to \$8,271,182.

**September 2007:** WVJIT converted \$133,208 worth of accrued interest and paid, in addition to the interest, \$2,500, for a total of \$135,708 for 194,322 shares of common stock in Protea. The \$2,500 was to exercise a warrant that was about to expire for 25,000 shares at \$0.10 per share.

**March 2007:** Protea repaid the October 1, 2002 convertible note of \$250,000 including the accumulated interest of \$47,945. The note included warrants to purchase common shares of the Company. These warrants survive prepayment of the note. Protea also opened its new facility at 955 Hartman Run Road in Morgantown. The 7,500 square foot corporate facility houses a state of the art Protein Research Lab, which features the ABI 4800 MALDI TOF/TOF and Thermo Finnigan LTQ XL mass spectrometers.

**November 2004:** The WVJIT Board of Directors approved an additional \$250,000 investment in Protea. The investment was a two-year 10% convertible debenture with 50% warrant coverage for notes purchased. In addition to the convertible loan by the WVJIT for \$250,000, the Company closed a \$250,000 common stock round with

#### **Overall Conclusion**

Based on the foregoing, the WV Jobs Investment Trust finds it most appropriate to record its investment in Protea Biosciences, Inc. at value, which is currently presumed to be the same as cost or **\$3,583,438**.

---



# Spectrum Radio Group

## Snapshot:

Company: **Spectrum Radio, LLC**  
Website: spectrumradiogroup.com  
Location: Fairmont, WV  
Total Employees: FT/8; PT/9  
WV Employees: FT/8; PT/9

**WVJIT Investment: \$142,500**  
**(Write-Down of \$142,500)**  
**WVJIT Ownership: 19.03%**  
**Subject to GASB 62: NO**

## Leadership

**Alan J. Michaels, Managing Partner**  
**Robert A. Woodward, Managing Partner**  
**Nick Fantasia, Managing Partner**

## Background

Spectrum Radio Group (SPG) is a media holding Company founded in 2012 to acquire four radio stations within the Morgantown/Fairmont/Clarksburg area. The radio stations looking to be acquired were: WZST (100.9 FM) Westover, WV; WRLF (94.3 FM) Fairmont, WV; WTCS (1490 AM); WMMN (920 AM). SPG strongly believed these radio stations would significantly benefit by new ownership that had experience in a variety of radio markets to bring new sales, promotion and programming techniques to these respective stations.

## WVJIT Investment History

- **September 2013:**
  - \$285,000 equity investment (all from WVCAP)
  - 9% Quarterly Dividend; No Warrants; 1x Redemption; 1:1 Conversion Rate
- **April 2015:**
  - \$200,000 Convertible Debenture
  - Interest payable monthly at 9%
- **August 2015**
  - Write-down of 50% of the amount invested in Spectrum Radio, \$142,500

## Debt/Equity Structure

Newtek Loan  
Seller Note  
WVJITB  
MCDA

---

**Total Outside Capital Sources: \$1,575,000**

**WVJIT FY2015 Dividend Revenue Accrued: \$26,650.00**

**WVJIT FY2015 Dividend Revenue Cash Rec: \$0**

**Products and Services**

	<p style="text-align: center;"><b><u>WZST-FM: Variety 101</u></b></p> <p>The West Virginia University Flagship station, WZST-FM, is an Adult Contemporary radio station licensed to Westover, West Virginia, serving the Morgantown/Fairmont/Clarksburg market area. Except when delivering pre-game, game and post-game shows for WVU Sports. Go Mountaineers!</p> <p>Variety 101 targets Women 18-49 as part of its core demographic audience. Variety 101 airs Elvis Duran in the mornings and Ryan Seacrest in the afternoons.</p>
	<p style="text-align: center;"><b><u>WRLF-FM: Rock 94</u></b></p> <p>WRLF is a Classic Rock formatted broadcast radio station licensed to Fairmont, West Virginia, serving the North-Central West Virginia area.</p> <p>WRLF simulcasts WVU Sports and targets men 35-64 with its music play lists.</p> <p>WRLF-FM, Fairmont, WV is its heritage station and its genesis is two generations of the Nick Fantasia family with the third generation being paid homage as RLF stand for Rose and Lou Fantasia, the family patriarchs.</p>
	<p style="text-align: center;"><b><u>WTCS-AM: News-Talk 1490</u></b></p> <p>WTCS-AM is a News/Talk/Sports formatted broadcast radio station licensed to Fairmont, West Virginia, serving the Fairmont/Grafton area.</p> <p>WTCS airs America in the Morning with Jim Bohannon, Imus in the Morning, Dennis Miller, Clark Howard, and Ed Schultz. WTCS is also an affiliate of Bloomberg Business Radio.</p>



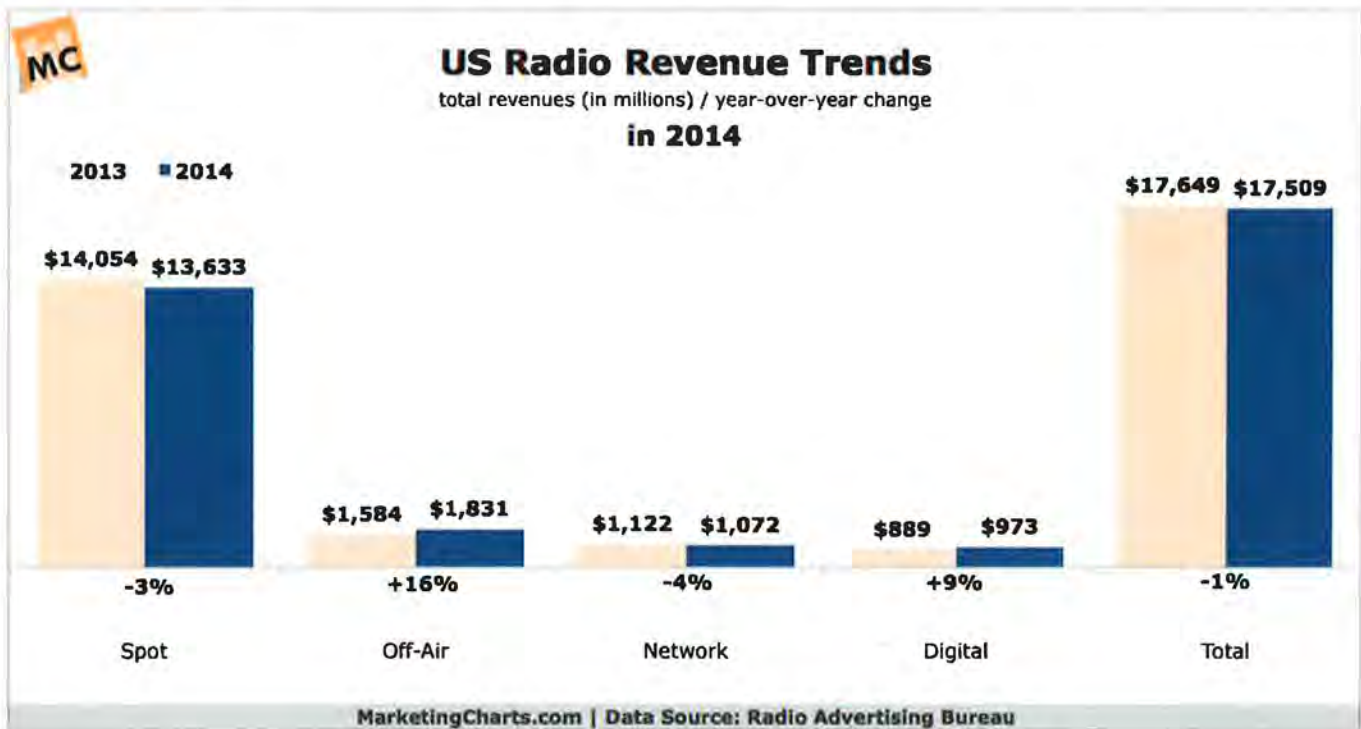


**WMMN-AM: Sports-Talk 920**

WMMN is a News/Talk/Sports formatted broadcast radio station licensed to Fairmont, West Virginia, serving North-Central West Virginia.

**Market Summary**

Increases in off-air (+16%) and digital (+9%) revenues were almost enough to offset decreases in spot (-3%) and network (-4%) revenues last year, as overall radio revenues slipped by 1% to slightly more than \$17.5 billion, per the RAB. Auto dealers/dealer groups/manufacturers comprised the top-spending category, but cut spending by 2%. Four of the top 10 categories increased spending: #2 communications / cellular (+1%); #4 healthcare (+4%); #5 professional services (+4%); and #8 insurance companies (+3%). Meanwhile, AT&T ranked as the top-spending advertiser, followed by Comcast Xfinity Cable Services, T-Mobile, McDonald's and Verizon Wireless



**Industry Summary**

**2015 Radio Trends – Media Post**

**Cross-Platform: Taking it a Step Further**

Radio isn't just facing the threat of Pandora and Spotify any longer. There are a plethora of other media now competing for the same advertising dollars, including other Internet radio offerings and mobile ads. Radio has one

of the largest and most diverse audiences of any medium, so by leveraging the size with a cross-platform interactive experience, stations can compete in a more meaningful way. Cross-platform advertising is even more important since a recent study by Google reported that many digital ads are never actually seen. With the amount of funds allocated toward digital advertising, the fact that 56.1% are actually not seen by a human makes buyers very uncomfortable.

### **Ad/Promo Testing and Optimization**

New mobile technologies integrated with radio will advance the methods by which real-time testing of ads and promotions aired on radio stations are conducted. This is key for stations to measure the popularity of new music and preferences of the listeners and for advertisers to gauge the efficacy of special offers and creative in real-time. These insights will allow advertisers and stations alike to quickly optimize campaigns to produce the greatest response. This testing is done best through a mobile app because it is the quickest way for the audience to respond.

### **Advertisers Demand Engagement and ROI Data from Radio Campaigns**

With new mobile technologies tied to the broadcast, advertisers can measure, track and optimize radio campaigns just as they do with digital. Advertisers are quickly seeing the value radio offers and the direct results tied to it. We predict that these capabilities will have radio dollars moving from digital to radio as a result.

### **Drive to Retail: Both Online and Offline**

In 2015, it is predicted that radio's integration of more sophisticated location technology with their mobile app will help stations prove ROI to skeptical advertisers. Geo-targeting and location-based marketing was a notable trend in 2014, so it is anticipated that in 2015 the trend will be taken a step further, demonstrating that these targeted ads are not only reaching the consumer, but also driving them into the store.

Mobile will continue to be a major player in 2015, but in a more strategic way. Smartphones and tablets are how many people stay connected and, accordingly, most advertisers are dramatically shifting their strategy towards mobile (46%).

As such, radio stations that leverage mobile strategies will be better positioned to reach their total listening audience — broadcast, online and mobile — driving more revenue to the industry as a whole.

### **Significant Events**

**June 2015:** A Convertible Debenture was approved by the WVJIT Board in the amount of \$200,000. The Debenture is structured with two tranches, each at \$100,000. The proceeds are to purchase a CD at First Exchange Bank to collateralize a line of credit. The repayment of the Debenture needed to be adjusted to coincide with Newtek's loan conditions. At this time, the loan has not closed.

**March 2015:** Nick Fantasia stepped into the role of acting General Manager of Spectrum Radio Group. Company continues to pursue a LOI with several buyers.

**December 2014:** Mark Thompson resigned as manager of Spectrum Radio Group.

---



**WV JOBS INVESTMENT TRUST BOARD  
ANNUAL INVESTMENT ANALYSES  
JUNE 30, 2015**

**June 2014:** The Company entered into an LOI to explore a buyer's interest in acquiring the assets of Spectrum Radio. A meeting was held the week of July 21, 2014 where the Board met with the Buyer to discuss purchase price and timing of an APA and LMA.

**September 2013:** Company closed a \$285,000 equity investment from WVJIT.

**Overall Conclusion**

Based on the foregoing, the WV Jobs Investment Trust finds it most appropriate to record its investment in Spectrum Radio Group, LLC at **\$142,500**.

---



**Snapshot:**

Company: Troy, LLC  
Website: troyllcww.com  
Location: Harrisville, WV  
Total Employees: FT/63; PT/0  
WV Employees: FT/63; PT/0

**WVJIT Investment: \$791,221**  
**WVJIT Ownership: 16.67%**  
**Subject to GASB 62: NO**

**Leadership Team**

**Martin Ballen, CEO/ Director of Sales**

**Richard Kerns, Chief Operating Officer/ Chairman of the Board of Directors**

**Linda Golden, Materials Control Manager**

**Lisa Hadley, Controller**

**Wilma High, Consultant**

**Background**

Troy Mills, Inc., a New Hampshire based Company, was established in 1865. It owns an 85,000 square foot facility located in Harrisville, West Virginia and supplies needle punched textile products to niche markets. The Harrisville facility is a Tier-One and Tier-Two supplier to the automotive industry and is also a supplier to the apparel industry. The facility produces automotive interior fabrics and apparel linings and currently has 63 people working at the facility. The Company filed for bankruptcy protection in 2001. Mountaineer Capital, WVJIT, and two individuals purchased the West Virginia operation in March 2002. The Company has been organized as a Limited Liability Company known as Troy, LLC.

**WVJIT Investment History**

- **February 2002: \$500,000 Investment**
  - \$60,000 in Series A Convertible Preferred Membership Units
  - \$440,000 in Convertible Subordinated Term Loan
  
- **September 2009:**
  - Loan was modified and principal increased by the amount of past due interest.
  
- **May 2013: \$840,000 Investment**
  - Closed June 2013 convertible 5.5% loan. WVCAP Seed Capital Co-Investment funds accessed for \$420,000 of loan. WVCAP portion was repaid in 2014.



**WV JOBS INVESTMENT TRUST BOARD  
ANNUAL INVESTMENT ANALYSES  
JUNE 30, 2015**

**Total WVJIT Loan Balance: \$735,648**

**Total WVJIT Equity Balance: \$60,000**

**Co-Investors/Lenders**

WVEDA: \$252,737 – Debt

MOVRC: \$197,631 – Debt

WUB: \$358,177 Term Loan; \$515,003.78 LOC

**WVJIT FY2015 Interest Revenue Received: \$41,773.39**

**Warrants**

Date	Equity	Debt	Covg.	Type	Price	Term	Exp.	# Warrants	Exer. Cost
May-11	-	\$400K	10%	Pref. A	\$1,000	7	May-18	36	\$36K

**Board of Directors**

**Richard Kerns, Chief Operating Officer, Chairman of the Board of Directors**

Richard Kerns is a military veteran having served from 1965 to 1967. He was the Production Supervisor of FMC Corporation located in Parkersburg, West Virginia from 1968 to 1974. Mr. Kerns has been with Troy since 1974 where he has served in such positions as Production Supervisor and Manager of the Harrisville facility. Since March of 2002, Mr. Kerns has been COO and part owner.

**Martin Ballen, Chief Executive Officer**

Martin Ballen completed a four-year materials engineering program at General Motors Institute. After completion of the program, he joined GM's engineering department staff. Later, he would continue in the automotive field and join Chrysler Corporations' engineering staff. Through the years, Mr. Ballen has held various management positions with both GM and Chrysler. In 1970, he joined Troy Mills Inc. as a sales engineer. Since then Mr. Ballen has helped develop new applications for Troy's capabilities for various automotive customers at OEM, Tier One and Tier Two levels. In 1990, he became the VP of Automotive Business Group with responsibility for marketing, sales, and R&D, customer service and manufacturing. In 2000, he started the Prestwick Group, LLC, a representative for several manufacturers of materials for the automotive industry. In 2002, with Richard Kerns and an investment group, the purchase of Troy Mills was made and the name was changed to Troy, LLC. Mr. Ballen currently serves as CEO.

**Patrick Bond, Mountaineer Capital**

Pat Bond joined McCabe-Henley Properties LP as Managing Director in early 1998, Mr. Bond brings a wealth of experience in finance, administration, strategic planning, general management, and management information systems. Previously, Mr. Bond owned/operated an independent consulting practice, Growth Management Group that specialized in the areas of Business Environment Assessments, new product development, investment and

financial analysis and strategic planning. Prior to that, he was President of a natural gas marketing company and was President and CEO of Atlantic Financial Federal, a \$750 million savings and loan institution and all its business units. He graduated from WVU where he received both Master's and Bachelor's Degrees in Industrial Engineering.

**Sam Sommerville, CPA,**

Sam Sommerville is currently VP of Northeast Natural Energy and a former partner of the Simpson & Osborne Accounting firm. He is a graduate of Glenville State College, a certified public accountant (CPA), and is active in various professional, trade, and civic organizations.

**C. Andrew Zulauf, Executive Director, WV Jobs Investment Trust**

Andy Zulauf is the Executive Director of the West Virginia Jobs Investment Trust, a public seed investment fund. He has extensive experience in finance and venture capital, having served as Executive Director and Senior Loan officer for the West Virginia Capital Corporation, as a Partner and Managing Director of West Virginia operations for Adena Ventures, and as vice president and upper middle market commercial relationship officer for Fifth Third Bank.

**Products**

<b>Automotive</b>	Produces needle punch synthetic fabrics for applications that include seating trim, luggage compartments, molded door carpets and inserts, package trays and headliners.
<b>Apparel</b>	Recycle fibers for printed lining materials for work jackets and western theme clothing, saddle pads, gun cases, custom luggage and baseball caps.
<b>Industrial</b>	Produces felts, absorbency and shoddy materials using fine and coarse denier polyester, polypropylene and nylon fibers, coupled with a wide variety of support scrims and backings.



**Competition/Market Summary**

**Formed Fibers (Auburn, Maine)**

Specializes in Polyester Fiber, Fabric, Substrates, and Custom formed parts. The Company has three locations (Auburn, ME; Sydney, OH; Sumter, SC). FFT is the only auto supply Company that is vertically integrated from fiber to fabric to finished part. Each product they manufacture is custom designed for its intended use.



*Foss Manufacturing (Hampton, New Hampshire)*

Established in 1954, and has six business units (Automotive, Specialty Fibers, Kunin Group, Technical Products, Eco-Fi, and Ozite). They are a vertically integrated producer of engineered, non-woven fabrics and specialty synthetic fibers.

*IAC (Troy, NC)*

Specializes in plastics, fibers and other manufacturing components.

*Oxco Incorporated (Charlotte, NC)*

Since 1994, Oxco has built a reliable reputation for delivering quality nonwoven products with the most reliable service in the industry.

**Industry Summary**

According to a report by Transparency Market research, the global textile chemicals market was valued at \$19.66 billion in 2013 and is expected to reach \$25.42 billion by 2020, expanding at a CAGR of 3.7% from 2014 to 2020. Textile chemicals are generally defined as compounds, intermediates and chemicals used in processing and manufacturing of textiles. Textile chemicals improve and optimize the manufacturing process, endowing the final products with a specific function or particular desirable appearance. For instance, greenhouse fabrics (that reflect the sun), flameproof furniture fabrics and durable airbags for vehicles. Coating and sizing chemicals was the largest product segment of the global textile chemicals market, accounting for more than 30% of the global market volume in 2013. Home furnishing was the largest application segment of the global textile chemicals market in 2013 due to rising demand from the residential construction industry. In terms of volume, the segment accounted for more than 33% of the global market in 2013.

Asia Pacific dominated the Global Textile Chemicals Market, accounting for more than 50% of the total market volume in 2013. Rising demand for textile chemicals in apparels and industrial textiles segments is likely to drive the textile chemicals market in Asia Pacific in the next six years. Asia Pacific is expected to be the fastest growing region in the textile chemicals market in the next few years. Increasing demand for textile chemicals in fast developing nations in Asia, such as India and China, is expected to drive the textile chemicals market in Asia Pacific in the next six years. Furthermore, factors such as steady economic recovery in the U.S. and Europe and higher demand for textile chemicals in RoW are anticipated to boost the global textile chemicals market in the next few years. Key players operating in the textile chemicals include The Dow Chemical Company, Solvay S.A., Zhejiang Longsheng Group Co. Ltd (Lonsen), Archroma (formerly Clariant), BASF SE, and The DyStar Group.

**Significant Events**

**April 2015:** Troy, LLC picked up a new customer with automotive customer, Lear Corporation.

**April 2014:** Mr. Kerns noted the refinancing of the WVJIT loan was complete. The annual interest rate was fixed at 5.5% with a 10 year amortization and a 3–5 year balloon.

---



**March 2014:** Troy entered into discussions with Oxco Inc., a Charlotte-based textile manufacturer looking to expand its exposure to the automotive market.

**December 2013:** During a Board of Directors Meeting, Mr. Kerns provided an update on the refinancing of Troy's debt with West Union Bank. Troy had hoped to close the loan by December 31, 2013; however, it appears the loan will close in mid- January 2014. Mr. Kerns has communicated this to the WV Jobs Investment Trust. There are no expected issues with closing the loan.

**September 2013:** West Union Bank approved a loan of \$680K (\$420K to pay down the WVJIT loan and \$260K to refinance the equipment loan). The proposed loan is amortized over 9 years, bears interest at 5.25% for 4 years, and thereafter at prime plus 2.5%, but not less than 5.25%. WVEDA will guarantee the loan for four years and there is a 1% fee on new funds, pending an affirmative at its meeting on September 2013. Mr. Kerns mentioned that United Bank will try to utilize an SBA or some other type of guarantee for the Company's request of a \$1.3M line of credit and a \$680K term loan.

**May 2013:** WVJIT and WVCAP approved an \$840,000 investment into Troy, LLC. Use of Proceeds were used for working capital as well as payment of outstanding debt held by Mountaineer Capital.

**July 2012:** Troy, LLC was featured in the July edition of "55 Good Things About West Virginia," which is a supplement to the "West Virginia State Journal." This article entailed Troy's continued success with car manufacturers and Carhartt apparel.

**June 2011:** Troy was in the midst of a year in which the auto industry initially saw considerable growth, recovering from the recession of 2008. The recession forced two domestic auto manufacturers to obtain federal financial assistance, shut down their dealerships, and to discontinue automobile brands.

Troy, like other tier one and tier two suppliers, who did survive the recession, enjoyed a strong recovery until the Japanese economy, including much of the automotive industry was devastated by the 2011 earthquake, tsunami and nuclear power plant destruction. Troy temporarily lost a significant portion of their (indirect) business with Honda. It was anticipated, and appeared to be on track, that Honda and the rest of the Japanese auto industry would recover soon. However, in the meantime, Troy needed additional security for its loan covenants (see May 2011).

**May 2011:** The WVJIT Board of Directors approved a \$400,000 demand note due in twelve (12) months. Troy used the proceeds to purchase a certificate of deposit to secure the Company's existing credit line. Note was paid in full on May 2012.

**June 2010:** Troy's \$975,000 revolving line of credit with Huntington Bank was set to expire on December 31, 2009. Huntington Bank informed Troy, at least 6 months prior, that they would not renew the credit line.

**September 2009:** Troy requested a modification to the current loan they had with WVJIT and with Mountaineer Capital. Both lenders agreed to modify the loan to provide interest only payments from October 2009 until maturity of the loan, which was April 2011. In conjunction with the modification, the interest rate on each loan was changed from 8% to 6% fixed for the remaining term of the loan.

---



**June 2009:** The credit crisis that struck in the fall of 2008 resulted in the plummeting of vehicle sales. In response, OEMs slashed production at unprecedented rates in an attempt to combat expanding inventories. Adding to the problems, General Motors and Chrysler extended scheduled plant shutdowns as they entered bankruptcy, depriving many North American suppliers, including Troy, of their main revenue sources. Both large, tier 1 suppliers along with numerous smaller suppliers filed for bankruptcy. Troy continued to look for ways to reduce cost and conserve cash. Additionally, in April 2009, Troy secured funding from the Mid-Ohio Valley Regional Council. The working capital loan was used to bridge the Company in anticipation of increased sales activity in the fall of 2009. The economic hardship caused the Company to fall behind (4 months, \$13K) on the interest-only loan payment to WVJIT.

**February 2002:** Investment of \$500,000 was made to Troy, LLC and funded as follows: \$60,000 in Series A convertible preferred membership units and \$440,000 in a convertible subordinated term loan that was used to acquire the assets of the Harrisville, West Virginia facility and to properly capitalize the facility to ensure necessary working capital.

#### **Overall Conclusion**

Based on the foregoing, WV Jobs Investment Trust finds it most appropriate to record its investment in Troy, LLC at value, which is currently presumed to be the same as cost or **\$791,221**.

---



**Snapshot:**

Company: **US Glass, Inc.**  
Website: **Usglss.com**  
Location: **Williamstown, WV**  
Total Employees: **FT/2; PT:0**  
WV Employees: **FT/0; PT:0**

**WVJIT Investment: \$20,000**  
**WVJIT Ownership: 40.0%**  
**Subject to GASB62: YES**

**Leadership**

**Gene Bem, Chief Executive Officer**  
**Ed White, Chief Financial Officer**  
**Jaci Volles, Marketing Advisor**

**Background**

US Glass, formed in 2012, acquired the 107 year-old Fenton Art Glass Company. As part of the acquisition, US Glass acquired the intellectual property, molds, color formulas, and name. The goal for US Glass is to produce new, modern design functional tableware in the “Made in America” tradition that cannot be replicated in China or anywhere else in the world.

**WVJIT Investment History**

- **March 2013**
  - Provided an initial investment of \$100,000 in Series AA Preferred Units.

**Total WVJIT Investment: \$100,000 funded through WVCAP**

**GASB 62 Valuation: \$20,000**

**Co-Investors (Shares)**

Interactivity Foundation  
Parimal Patel/Kinequity Group  
Ed White  
Peter Walsh  
Guillame Gauthereau  
Jeff Rich  
Robert Tanko  
Callann Wolff  
Bill Maloney



**Management Team**

**Gene Bem, Chief Executive Officer**

With over 20 years of experience as a Management Consultant and Investment Advisor to senior executives, Gene Bem has worked with clients of all sizes from the Fortune 500 to start-ups. He has held senior partner positions in two Boston based boutique strategy firms and Oliver Wyman (formerly Mercer Management Consulting), one of the largest consultancies in the world. His expertise is primarily in crafting and implementing winning strategies for corporations using sound customer analysis combined with innovation portfolio valuation.

**Jaci Volles, Marketing Advisor**

Jaci Volles served as the Chief Marketing Officer of EveryWare Global, Inc. from April 2012 to February 19, 2014. Ms. Gagnon-Volles joined EveryWare in July 2011 as Vice President of Marketing. Prior to EveryWare, she worked at Home Products International from 2007 to 2011 as Executive Vice President Sales and Marketing. She served as the Chief Merchandising Officer for Lifetime Brands/ Pfaltzgraff responsible for the Direct-to-Consumer division and Wholesales sales and marketing teams from January, 2004 to June 2007. Ms. Volles served as Vice President of Marketing at Libbey, Inc. and held several positions in the Anchor division of Newell Rubbermaid.

**Ed White, Chief Financial Officer**

Ed White recently announced his retirement from a career spanning 38 years at Owens-Illinois (O-I), a fortune 500 company that is the largest manufacturer of glass containers and packaging goods. He has served as an SVP of Owens-Illinois since 2003 and has been its CFO and Principal Accounting Officer since 2005. Mr. White also serves as the President, CFO and Chief Accounting Officer of Owens-Illinois Group Inc. and has previously held positions within the company in Finance, Planning and Administration-International Operations and Sales and Marketing for Owens-Illinois Europe.

**Board of Directors**

**Gene Bem, Chief Executive Officer**

**Ed White, Chief Financial Officer**

**Parimal Patel**

With multi-industry experience as a management and operations strategy consultant and operations leader for Fortune 500 companies, Parimal Patel has deep operational performance and supply chain expertise allowing companies to grow effectively and improve profitability. Mr. Patel has held positions on the management team of a Big 4 firm focused on Strategy and Operations and Program management roles for Fortune 100 firms, and also published thought leadership around operational effectiveness and scaled growth.

---



**Dr. Jack Byrd**

Dr. Jack Byrd is an Industrial and Management Systems Engineering Professor at West Virginia University. Dr. Byrd has over 20 years of experience working with over 100 organizations in manufacturing, healthcare, service and Government. His area of emphasis is in Operations Management, Training Systems, Employee involvement, Integrated Product Development and continuous quality improvement. In addition, Dr. Byrd serves as President of the Interactivity Foundation, a public policy foundation engaging citizens in the exploration and development of possibilities for public policy. Dr. Byrd received his Ph.D. from WVU and is a Registered Professional Engineer in the State of West Virginia.

**Michele O'Connor**, West Virginia Jobs Investment Trust

Michele O'Connor has more than 25 years of experience in the finance and banking industry. She attained her Certified Financial Planner designation along with the Accredited Investment Fiduciary Manager designation. She was the Portfolio Manager for the Trust Department at First United Bank and managed over \$600 million for the department. Currently, she is the Investment Manager for the West Virginia Jobs Investment Trust, which is a leading venture capital firm focused on turning the innovation of new ideas into successful world-class companies. Ms. O'Connor graduated Magna Cum Laude with a BA in Finance from the University of Maryland College.

**Products**

US Glass plans to manufacture housewares, figurines and tabletop items utilizing the Fenton molds with some updated designs from local and national artisans. The Company will distribute the items to major retail outlets such as Williams-Sonoma, Bed Bath & Beyond, Neiman-Marcus, among others. US Glass hopes to be part of the strong consumer trend of being one of the few "Made In America" glass manufacturers.



**Competition/Market Summary**

Competitors for US Glass range from local West Virginia glassware companies such as Blenko and Homer-Laughlin to global manufacturers such as Lalique, Baccarat, and Daum. The firm's competitors in the ultra-high-end crystal and glass functional and decorative items are a variety of general home décor manufacturers and distributors for whom handmade glass specialty items are either a minor entry in their product lines or miss altogether. Those ultra-high-end manufacturers are Waterford Wedgwood, Swarovski, and Rogaska.

---



**Industry Summary**

**Global Tableware Market**  
Market Trends, Drivers & Projections

**November 2014**

**Global Market by Geography**

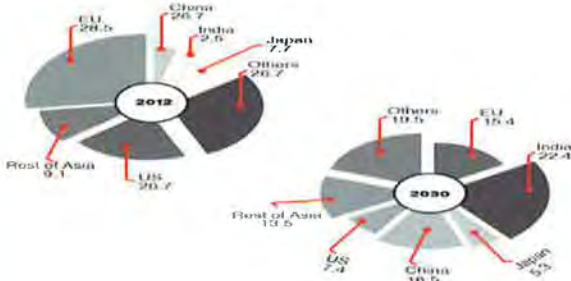


**Competitive Landscape**



**Opportunity Indicator**

**Global Middle Class Population (% Breakdown)**



**Global Market Potential**

Market projected to reach US\$41.3 billion by 2020



**Market Drivers & Challenges**

Luxury Lifestyles in Emerging Countries

Rise in "Living" as a New Living Trend

Increase in Number of Restaurants

Shortage of Skilled Artists

Perpetual Changes in Consumer Preferences

Rising Cost of Production

**Global Market by Product Segment**



Dinnerware  
Flatware  
**Glassware (Fastest Growing at 3.9% CAGR)**  
Crystalware

### Significant Events

**June 2015:** US Glass presented its samples at the Walmart “Made in the USA” Summit Presentation in Bentonville, AR. The Company also announced that Iphimedia Group intends to make a tender offer on preferred shares and debt of US Glass, Inc. on or about August 15, 2015.

**March 2015:** In the Company’s March Annual report to shareholders, the Company was able to develop its product line for 2015, develop sample pieces for road and tradeshow, as well as start relationships with several target customers including Walmart.

**December 2014:** Baceline Investments, the Denver-based real estate investment firm, has dropped out from potentially investing in the Williamstown facility. In a conference call, Mr. Bem updated the shareholders and the Board of the notice and requested the hire of Troy Smith to serve as a consultant to manage the 12 property and environmental issues needing to be resolved.

**September 2014:** The Company hired Elizabeth Haggarty as VP of Sales for US Glass. The Company also continued to work through the Uranium issues at the Fenton Facility. Mr. Bem was in negotiations with the WVDEP to resolve the outstanding issues.

**June 2014:** US Glass Board meets to vote the hiring of Jaci Volles, marketing and retail consultant for US Glass. Ms. Volles laid out in the June board meeting the revised marketing plan for the Company, which the Board decided to implement. US Glass was notified of signed LOI by George Fenton for the Williamstown facility.

**May 2014:** US Glass has meeting with Walmart to discuss product orders, sourcing, and appropriate product positioning as well as discussions with manufacturers for production.

**March 2014:** It was discovered that the facility contained a number of issues relating to the corrosive natural gas line, storm water permit compliance, landfill and depleted uranium permits compliance. Given the environmental concerns related to the facility site, the Wood County Board of Education voted not to consider the site.

**February 2014:** Wood County Board of Education meets to discuss proposed site for the new elementary school at the Fenton Facility. The Board of Education voted to enter into talks to buy the Fenton Glass property.

**January 2014:** Baceline Investments provided a letter of intent to George Fenton for the acquisition of the Williamstown facility. The investment firm, along with Kinequity Group and US Glass, were in negotiations with George Fenton and his advisors.

**November 2013:** US Glass, in collaboration with Kinequity group and Baceline Investments, started the process to acquire the Williamstown Facility under a new company.

**September 2013:** US Glass was in negotiations with Everyware Global Inc., to potentially license the brand for the Company’s table top tier chain. This joint venture also contains the possibility of Everyware making a Series A

---



**WV JOBS INVESTMENT TRUST BOARD  
ANNUAL INVESTMENT ANALYSES  
JUNE 30, 2015**

investment. Everyware Global is partially owned by Monomoy Capital Partners, a NY-based private equity firm specializing in Consumer Retail companies.

**July 2013:** Fenton Glass Society Convention gathered at the Williamstown facility. Mr. Bem updated the collectors on the status of US Glass efforts to rebuild the Fenton brand and to restart full scale glass production at the factory in Williamstown.

**June 2013:** US Glass terminated its relationship with iGNTIATE and continued to solicit investors for the Series A Common Round.

**March 2013:** WVJIT invested \$100,000 through WVCAP for 100,000 Series AA Preferred Units in US Glass.

**November 2012:** US Glass investment approved by WVJIT Board of Directors and WVCAP Committee following term sheet signature and completion of due diligence.

**Overall Conclusion**

US Glass has yet to recognize revenue for the fiscal year; however, the Company has made tremendous progress in marketing and business development. Most recently a “Made in America” presence with one of the nation’s largest retailers.

Based on the foregoing, WV Jobs Investment Trust finds it most appropriate to record its investment in US Glass, Inc., at value, which is currently presumed to be the same as cost or **\$20,000**, per GASB 62 adjustment.

---



**Snapshot:**

Company: Vandalia Research, Inc.  
Website: Vandaliaresearch.com  
Location: Huntington, WV  
Total Employees: FT/4; PT/1  
WV Employees: FT/4; PT/1

**WVJIT Investment: \$559,376**  
**WVJIT Ownership: 10.71%**  
**Subject to GASB 62: NO**

**Leadership**

**Derek Gregg, Chief Executive Officer**

**Background**

Vandalia Research, Inc., was founded in 2004, and is a life sciences Company based in Huntington, West Virginia. Vandalia is the first biotechnology Company based upon Marshall University research, specializing in DNA production by polymerase chain reaction (PCR). Vandalia holds an exclusive license to the proprietary Triathlon technology. This technology is capable of providing milligram and gram quantities of custom PCR-amplified DNA for a variety of applications, such as DNA vaccines, diagnostic standards, genetic therapy research and custom probes.

**WVJIT Investment History**

- **February 2008:**
  - \$275,000 in Series A Preferred Stock
- **May 2009:**
  - \$325,000 LOC bridge loan convertible into Series A preferred Shares
  - \$200,000 was drawn from LOC
- **April 2010:**
  - Conversion of \$200,000 convertible debt, plus interest into Series A Preferred Units
- **August 2010:**
  - \$75,000 Series A Preferred Investment
  - 8% Quarterly Dividend

**Warrant Coverage:** None

**Co-Investors:**

Mountaineer Capital

**Total Outside Capital:            \$1,865,000**

---



**Management Team**

**Derek Gregg, CEO**

Derek Gregg is a founder and CEO of Vandalia Research, Inc. He has held primary responsibility at Vandalia Research since its founding in 2004 for product development, manufacturing, quality control, business development, sales and marketing, and government relations (including grants and contracts). He is an inventor on two patent applications and is an author on one peer-reviewed publication. In 2007, he and co-founder Justin Swick were featured in *Entrepreneurship: Successfully Launching New Ventures* (2nd Edition). He holds a BS in Integrated Science and Technology from Marshall University. Mr. Gregg also currently serves as Chair of the Biosciences Association of West Virginia, a new trade association devoted to promoting the biosciences industry within the state.

**Board of Directors**

**Derek Gregg, CEO**

Derek Gregg is the primary day-to-day manager of Vandalia Research. He is responsible for the financial and personnel resources of Vandalia, purchasing, communications, and other management duties. He plays a large role in writing grants, patents, and developing strategic partnerships. He is also currently directing the sales and marketing activities of the Company.

**Liz Murray, Ph.D.**

Dr. Liz Murray received her Ph.D. in Genetics from the University of Kansas in 1986. She is employed by Agrigenetics, a company helping in the process of developing insect resistant plants. She also worked for Promega Corporation for eight years, where she headed manufacturing for DNA typing products. Dr. Murray holds three U.S. patents for her inventions and maintains many active contacts in molecular biology reagent businesses.

**Patrick Bond, Mountaineer Capital**

Managing Director of McCabe-Henley Properties LP since 1998, Pat Bond brings a wealth of experience in finance, administration, strategic planning, general management and management information systems. Previously, Mr. Bond owned/operated an independent consulting practice, Growth Management Group that specialized in the areas of Business Environment Assessments, new product development, investment and financial analysis and strategic planning. Prior to that, he was President of a natural gas marketing company and was President and CEO of Atlantic Financial Federal, a \$750 million savings and loan institution and all its business units. He graduated from WVU where he received both Master's and Bachelor's Degrees in Industrial Engineering.

**Lee C. Haikal, M.D.**

Dr. Lee Haikal is a native of South Charleston, West Virginia, and a graduate of Marshall University School of Medicine. He completed a residency in diagnostic radiology at the University of Louisville Hospital and a fellowship in vascular and interventional radiology at Methodist Hospital in Indianapolis, Indiana. Dr. Haikal

---



primarily performs interventional radiology procedures and is also proficient in plain film radiology, CT, ultrasound, nuclear medicine and mammography exams. He is Board of Directors certified in diagnostic radiology and has been with Radiology, Inc. since March 2003.

**C. Andrew Zulauf, Executive Director, WV Jobs Investment Trust**

Andy Zulauf is the Executive Director of the West Virginia Jobs Investment Trust, a public seed investment fund. He has extensive experience in finance and venture capital, having served as Executive Director and Senior Loan Officer for the West Virginia Capital Corporation, as a partner and Managing Director of West Virginia operations for Adena Ventures, and as vice president and upper middle market commercial relationship officer for Fifth Third Bank.

**Products**

The Triathlon is the first system and process to enable the polymerase chain reaction (PCR) to be used for the large-scale manufacturing of DNA Sequences. Its primary advantage is a continuous method for heating and cooling the PCR reagents, which facilitate processing unlimited volume without having to pool the products from multiple test tubes. The result is:

- Reduced Labor
- Decreased turnaround time
- Reduction in opportunities for contamination

**Competition/Market Summary**

Custom manufactured DNA is a very limited market with few identified competitors. The two most significant competitors identified are Takara Bio and SeqWright Genomics Services.

**Takara Bio**

Takara Bio is part of Takara Holding Company, Inc., and represents the biomedical business interests of its parent company. Takara Bio is committed to improving the human condition through biotechnology through three primary areas of focus; developing research tools for the life sciences, gene therapy, and nutraceuticals. Takara has been focusing on biomedical research since it launched the Bio group in 1967.

From its start in manufacture and supply of restriction enzymes in 1979, Takara Bio has positioned itself as a leading company in the Japanese life science market. Takara's acquisition of Clontech is one of many steps the company is taking to continue to provide innovative tools that allow customers to access technological advancements in the life sciences.

**SeqWright Genomic Services**

SeqWright Genomic Services is a Contract Research Organization (CRO) specializing in providing a wide variety of genomic services, including the full-service nucleic acid technology CRO, molecular biology, to microarray and next generation genomics. Founded in 1994 by John W. Belmont, M.D., Ph.D. and Richard Gibbs, Ph.D., of the

---



Human Genome Sequencing Center, SeqWright was acquired by Clariant Diagnostic Services, Inc., a GE healthcare company in 2012.

### Aldeveron

Aldeveron is a privately-held biotechnology company that is providing contract manufacturing and scientific services. They specialize in Plasmid DNA, Protein Production and Antibody generation. The company was founded in 1998 and is headquartered in Fargo, ND, with affiliate offices in Madison, Wisconsin and Freiburg, Germany. Aldeveron has 70 employees and close to 50 written patent publications.

### Industry Summary

The global market for genomics is expected to reach USD 22.1 billion by 2020, growing at an estimated CAGR of 10.3% from 2014 to 2020, according to a new study by Grand View Research, Inc. Genomics play an imperative role in the field of infectious disease testing by enabling the use of fast and effective result rendering molecular diagnostic tests. This, coupled with growing prevalence of infectious diseases and hospital acquired infections is expected to drive market growth during the forecast period. Other driving factors for this market include decreasing prices of DNA sequencing, increasing demand for genome analysis in animal and plant feedstock, extensive presence of both private and public external funding programs and growing patient awareness levels. In addition, presence of untapped growth opportunities in emerging countries such as India, Brazil and China and the increasing health awareness are expected to serve this market as future growth opportunities.

Genomics based diagnostics dominated the overall market in terms of revenue at 36.4% in 2013 majorly owing to the presence of a relatively larger number of R&D programs. Genomics based personalized medicine segment on the other hand is expected to grow at the fastest CAGR of over 12.0% from 2014 to 2020 due to increasing demand for population based therapeutic solutions and subsequent increase in R&D initiatives.

### Significant Events

**June 2015:** Vandalia Board of Directors will evaluate the current management, operational, and financial conditions of the Company and explore options to sell Vandalia to interested buyers.

**March 2015:** Derek Gregg announces his departure from Vandalia to pursue his graduate studies.

**September 2014:** Acquisition negotiations discontinued between Vandalia and the acquirer. Mr. Swick announces his departure from Vandalia.

**February 2014:** Vandalia Research was awarded an \$18,220 grant via CAM/TechConnect for an analytical system that would help the Company commercialize a key product and achieve important industry certification and compliance. The Company also ran an upgraded triathlon sidewinder and achieved clearer results and views of DNA Gels.

**September 2013:** Vandalia Research was in negotiations with a publicly traded biotechnology company to be acquired. Company also had preliminary discussions with larger-cap biotechnology companies.

---



**January 2013:** Vandalia announced it won the approval for a no-cost extension for the Pandemic Influenza Vaccine Program. Vandalia also announced several proposed investments for 2013 including a New Triathlon Lab, ISO 9001 Certification, and reconfiguring the Vandalia offices. They also planned to attend several conferences for the purposes of business development such as the BIO2013 conference in Chicago, Bio-Tech Japan, and TradeWinds Asia in Korea.

**July 2012:** Vandalia announced a spinoff company called Crosscutting Concepts, LLC. This Company will develop, manufacture, and market hands-on science products for high school and post-secondary education students.

**July 2012:** WVJIT Board of Directors approved \$300,000 in equity financing through WVCAP and matched by Crosscutting Concepts, LLC.

**June 2012:** Vandalia Research was scheduled to present at the Global Technology Community's 10th Vaccines Research and Development: All Things Considered conference in mid-July.

**May 2012:** Vandalia Research received a U.S. Patent covering their process that involves large-scale DNA production using polymerase chain reaction (PCR).

**June 2011:** Vandalia Research announced significant progress on several recent efforts. The Company followed the four recent additions to the Lyle & Louise educational modules with two new modules planned for January 2012.

Vandalia announced that they received a U.S. Department of Defense (DOD) contract for \$1.049 million for the Flu Vaccine Technology Program, which is a pre-clinical development of a pandemic flu vaccine manufactured by Vandalia's Triathlon bioreactor.

**June 2010:** Vandalia Research expects to be the recipient of the DOD contract in collaboration with Innovio Biomedical, with work starting after October 2010. Of the \$325K line of credit approved in April 2009, \$200K was funded. In April 2010, WVJIT converted the \$200K plus accrued interest to Series A preferred equity.

**June 2009:** Rep. Nick J. Rahall announced that he secured \$1.5 million for the Department of Defense (DOD) technology development by Vandalia Research in the Fiscal Year (FY) 2010 Department of Defense Appropriations Act (H.R. 3326). The \$1.5M in funding secured by Rep. Rahall for Vandalia Research, Inc. would be used to collaborate with Innovio Biomedical in San Diego, CA to work with the U.S. Army on applications for their technology. This technology would allow for the development of vaccines and medicines to prevent or cure severe viral pandemic diseases based on Vandalia's linear DNA fragments that will expedite and enhance the quality of vaccines.

**May 2009:** WVJIT committed to a \$325,000 line of credit bridge loan convertible into Series A preferred shares as part of a \$650K new round of financing. The funding was to be released periodically, based on milestones accomplished. A portion of the WVJIT investment (\$125K) was reserved for construction and equipment costs necessary for a GMP facility, assuming the Company was not able to gain funding from alternative sources.

---



**March 2008:** Vandalia Research raised the initial half of a \$1.5M Series A preferred stock sale with WVJIT and Mountaineer Capital. The funding was used to accomplish the following milestones:

- Continue to fund and expand the Company's intellectual property coverage.
- Enhance physical infrastructure and institutional processes to support cGMP and ISO-certified manufacturing of DNA products (critical for entry into regulated markets).
- Further develop corporate partnership efforts.
- Continue further product development and technology improvements on the Triathlon system.

**February 2008:** The WVJIT Board of Directors approved an investment of \$275,000 in Series A preferred stock to Vandalia Research to be used for working capital as part of a \$750,000 round with participation from Mountaineer Capital as well as existing shareholders.

#### **Overall Conclusion**

Based on the foregoing, WV Jobs Investment Trust finds it most appropriate to record its investment in Vandalia Research, Inc. at value, which is currently presumed to be the same as cost or **\$559,376**.

---



**Snapshot:**

Company: **Vested Health, LLC**  
Website: **vestedhealth.com**  
Location: **Charleston, WV**  
Total Employees: **FT/9; PT/0**  
WV Employees: **FT/8; PT/0**

**WVJIT Investment: \$999,997**  
**WVJIT Ownership: 8.46%**  
**Subject to GASB 62: NO**

**Leadership**

**Shawn Dobson, President/CEO**  
**Sherry Parks, Chief Financial Officer**  
**Carol Ball, Eligibility Specialist**  
**Tammy Moss, Financial Analyst**

**Background**

Established in 2001, Vested Health is a licensed third party administrator that offers unique, customized, portable healthcare solutions across a four part Consumer Directed Health Plan (CDHP): (1) a unique Vested Health Account (Health Reimbursement Arrangement (HRA), Health Savings Accounts (HSA) or Flexible Spending Account (FSA) used for day-to-day expenses and longer term savings; (2) health coverage or a high-deductible traditional health plan (HDHP) offered through leading insurance carriers; (3) proprietary technology, implementation and educational tools and; (4) services including the Benny Card, Web Accounts, Health Account Management System (HAMSTM). The company's proven approach to CDHP management has helped more than 375 client companies and 15,000 consumers reduce their overall healthcare costs. Vested Health is one of only a few venture-backed independent Consumer Directed Health Plan companies. Management has implemented solutions that have generated substantial health care savings in the last 11 years in a variety of industries.

Vested Health was organized in July 2001 to capitalize on this emerging new insurance product. CDHP's address the failings of HMOs by providing access to providers and at the same time creating the incentive to the covered employee/member to spend dollars wisely. For the employer, it still enables them to provide the much needed employee insurance benefits; however, it deduces the high level of uncertainty associated with a defined benefit plan and changes this to a more predictable financial outlay under a defined contribution plan.

Vested Health customers are regionally located companies located primarily in Ohio, West Virginia and South Carolina.

**WVJIT Investment History**

- **2002:**
  - \$250,000 in Series A preferred membership units.
- **2003:**
  - \$250,000 convertible debenture; converted into Series A Preferred membership units



- **2004:**
  - \$100,000 equity investment in Series B Preferred membership units
  - \$150,000 convertible debenture; converted into Series B Preferred membership units
- **2007:**
  - \$250,000 equity investment in Series C Preferred membership units

**Co-Investors/Lenders**

Mountaineer Capital

Adena Ventures

CapVest

Angel/Other Investors

**Total Outside Investment: \$5,300,000**

**Board of Directors**

**Thomas E. Parkinson, Adena Ventures**

Adena Ventures is a \$36 million venture capital fund that invests in companies in central Appalachia. Tom Parkinson is also a partner in Hopewell Ventures, a \$110 million Chicago-based fund targeting the Midwestern United States. In addition to his role with Vested Health, he is an observer on the Board of Directors of GamePlan, Inc. He was a Director of TLContact, Inc., until that company was acquired by Steve Case's Revolution Health Group in 2007.

Previously, Mr. Parkinson led a successful early-stage venture fund associated with Northwestern University, where he made and managed investments in more than 20 start-up companies, including Peapod, Inc. and Everyday Learning, Inc. He received his undergraduate degree from Northwestern University and his MBA from Northwestern's Kellogg Graduate School of Management and spent over ten years teaching courses as an adjunct professor in entrepreneurship and entrepreneurial finance at Kellogg and the University of Illinois at Chicago.

**Patrick A. Bond, Mountaineer Capital**

Pat Bond has been responsible for the origination/management of seven of the Mountaineer Capital's investments. Prior to joining Mountaineer, Mr. Bond served as Managing Director of McCabe-Henley LP, bringing a wealth of experience in finance, administration, strategic planning, general management, and information systems. Previously, he owned/operated an independent consulting practice, Growth Management Group, specializing in the areas of business environment assessments, new product development, investment and financial analysis, and strategic planning. Prior to that, Mr. Bond was President of a natural gas marketing company and was President and CEO of Atlantic Financial Federal, a \$750 million savings and loan institution and all its business units. Mr. Bond graduated from West Virginia University where he received his Master's and Bachelor's Degrees in Industrial Engineering.

---



**Michele O'Connor, West Virginia Jobs Investment Trust (Observer)**

Michele O'Connor has more than 25 years' experience in the finance and banking industry. She attained her Certified Financial Planner designation along with the Accredited Investment Fiduciary Manager designation. She was the Portfolio Manager for the Trust Department at First United Bank and managed over \$600 million for the department. Currently, she is the Investment Manager for the West Virginia Jobs Investment Trust, which is a leading venture capital firm focused on turning the innovation of new ideas into successful world-class companies. Ms. O'Connor graduated Magna Cum Laude with a BA in Finance from the University of Maryland College.

**Products**

Vested Health designs, implements, and serves as a third-party administrator of Consumer Directed Health Plans (CDHPs), including Health Reimbursement Arrangements (HRAs), Retiree Health Reimbursement Arrangements (RHRAs), Flexible Spending Accounts (FSAs), and Health Savings Accounts (HSAs). The Company has developed a unique HRA platform, which enables employers and consumers to maximize the control they have over their health care costs.

The Company has implemented HRA solutions since 2001 that have generated substantial healthcare savings in the last eight years in a variety of industries, which include but are not limited to, healthcare systems, hospitals, physician groups, financial institutions, software companies, U.S. government contractors, attorney partnerships, manufacturing, petroleum companies, hospice organizations, municipalities, and non-state government agencies. Their solution allows employers to retain control of account funds, as well as provides a flexible and manageable approach to funding contribution levels. Vested Health helps employers create cost-control solutions and the financial incentive for employees to become informed, motivated and engaged in the healthcare process.



In 2014, the Company outlined a new business strategy plan set on the defined contributions.

**Competition/Market Summary**

Health plans for businesses and their employees comprise a multi-billion dollar industry that is highly competitive. Well known national insurance companies like Prudential, Cigna, Aetna/US Healthcare, and the regional Blue Cross and Blue Shield companies seek the employer's dollar. A plentitude of HMOs, both regional and national, also compete. Many companies are already self-insured.

Many third party administrators (TPAs) are gravitating towards making sure their focus stays squarely on companies that are small to medium in size because they know that their products and services can suit these companies much better compared to a large corporation.

Recent studies have shown that more than 20% of the health insurance market is made up of Consumer-Driven Health Plans (CDHPs) and this number will continue to rise. Consumer-driven health plans help customers reduce

---



their health risks and improve the quality and efficiency of their care, resulting in lower total medical costs. This bodes well for other TPAs including Vested Health who can offer their CDHPs at a competitive rate and continue to grow their customer base.

The Supreme Court ruled on June 2015, that President Obama's health care law allows the federal government to provide nationwide tax subsidies to help poor and middle-class people buy health insurance. Without those subsidies, HealthCare.gov, which serves consumers in the 34 states that did not build their own exchanges, would've collapsed. Many shoppers would have been unable to afford the pricey plans on offer without a change to the law. Those between the ages of 18 and 35 would receive a tax credit of \$1,200. People 35 to 50 years old would receive \$2,100, and those over the age of 50 would receive \$3,000. Parents would receive \$900 per child up until age 18.

### **Industry Summary**

With the second year of subsidized private insurance and expanding state Medicaid coverage adding millions more insured Americans under the Affordable Care Act, health care insurers and medical care providers are already seeing billions of dollars in new revenue.

Two major barometers of health industry profits, insurance giant UnitedHealth Group UNH -0.82% (UNH) and hospital operator HCA Holdings HCA -0.64% (HCA) last week raised their 2015 revenue projections by billions of dollars.

HCA, in its preliminary 2015 first quarter report, said revenue could reach \$40 billion, an increase of the hospital chain's earlier outlook of between \$38.5 billion and \$39.5 billion. It raised its profit forecast as well. HCA chairman and CEO R. Milton Johnson said the quarter's performance was "driven by continued favorable volume and payor trends in core operations."

Meanwhile, UnitedHealth in its first quarter earnings report raised its revenue outlook for 2015 by \$2 billion, saying the insurer will now generate \$143 billion in revenue. UnitedHealth said it also saw growth in Medicaid where several states opted to expand coverage under the health law this year after ironing out political issues that kept them from expanding in 2014.

### **Significant Events**

**December 2014:** Vested Health was acquired by a regional healthcare company. Terms of the agreement were undisclosed.

**June 2014:** Vested Health introduced to the Board of Directors their business development plan for the defined contribution market. The Company announced it would partner with brokers within the state exchanges to generate a business development pipeline.

**April 2014:** Vested Health released to the Board of Directors the three-year business plan for the defined contribution market.

---



**WV JOBS INVESTMENT TRUST BOARD  
ANNUAL INVESTMENT ANALYSES  
JUNE 30, 2015**

**March 2014:** Vested Health achieved revenue which was slightly higher than forecasted, mostly attributed to the business to business development wins they achieved for the month. While the Company did see lower-than-forecasted expenses for the month, it realized a net operating loss for the period.

**June 2011:** Vested Health gained a strong foothold in the South Carolina market gaining several larger public employee groups in its recent earnings announcement.

**June 2010:** Vested Health served over 27,000 members in 42 states for over 340 employer groups. The Company was engaged in the development and implementation of OPEB liability mitigation strategies for several government clients, including Chester County, South Carolina, and the City of Myrtle Beach, South Carolina.

**June 2009:** Vested Health signed on 357 employer groups, 13,629 EE lives, and 27,292 members. The Company uncovered another line of revenues through GASB. GASB 43 and 45 became new governmental financial reporting requirements for all state and local governments that sponsor post-employment healthcare benefits. The major covered benefits included medical, dental, life insurance and disability.

**June 2008:** Vested Health saw significant changes in the management as former CEO and Founder, Mike Baker, left the Company. Shawn Dobson became the new CEO, and Sherri Parks served as Chief Financial Officer. The Company at the time, provided health coverage for 323 employees including 13,800 covered employees.

**September 2007:** The WVJIT Board of Directors approved a \$250,000 "follow-on" investment in Vested Health in the form of Series C preferred stock as part of a minimum \$4.0M round,

**June 2004:** The WVJIT Board of Directors approved an additional \$150,000 in Vested Health as part of a \$450,000 round. Each investment was structured as a convertible debenture with warrants to purchase Series B preferred stock and has been converted as described.

**November 2004:** The WVJIT Board of Directors approved a \$100,000 equity investment in Vested Health as part of a \$3.0M Series B preferred units round, which included approximately \$2.0M in new money and conversion of \$1M in debentures to equity. WVJIT converted \$335K in debentures to equity at the close of the round. WVJIT's equity ownership stood at 252,647 units or 13.21% of the Company.

**November 2002:** Vested Health raised an \$825,000 convertible preferred equity round with participation from WVJIT, Mountaineer Capital, Adena Ventures, and angel investors.

### **Conclusion**

Based on the foregoing, the WV Jobs Investment Trust finds it most appropriate to record its investment in Vested Health, LLC at value, which is currently presumed to be the same as cost or **\$0.00**.

---





**Snapshot:**

Company: WV Potato Chip, LLC  
Website: Buymisterbee.com  
Location: Parkersburg, WV  
Total Employees: FT/16; PT/1  
WV Employees: FT/16; PT/1

WVJIT Investment: \$312,012  
WVJIT Ownership: 21.74%  
Subject to GASB 62: YES

**Leadership**

Rick Barton, Chief Executive Officer  
Randall Holden, President  
April Hymen, Finance/Accounting Manager

**Background**

The WV Potato Chip Company, LLC was established in 2012 by Rick Barton and Randall Holden to manufacture potato chips under the Mister Bee brand. The assets to Mister Bee Potato Chips were purchased after the Company filed for bankruptcy protection in November of 2011. The Company owns and operates a plant in Parkersburg, WV capable of processing 3,600 pounds of potatoes per hour in various sizes.

The original Mister Bee brand was started in 1951 by Leo and Sara Klein. The Company grew to be a million dollar business in 1972 serving West Virginia and parts of Ohio and eastern Kentucky.

**WVJIT Investment History**

- **April 2013**
  - \$250,000 Series A Preferred Units; 7% Quarterly Dividend

**Warrants/Warrant Coverage:**

- 100% at 50% discount; with a 7 year time frame.

**Total WVJIT Investment: \$250,000 (\$125,000 funded through WVCAP)**

**GASB 62 Valuation : \$312,012**

**FY2015 Dividend Revenue: \$17,499.96**

**Co-Investors/Lenders**

Rick Barton  
Randall Holden

**Board of Directors**

**Rick Barton, Chief Executive Officer**

Rick Barton purchased the assets to Mister Bee in the beginning of 2012 and assumed the role of CEO. He has a large amount of business experience previously serving as an executive with Simonton Windows. After leaving Simonton, he founded Wincore Windows, a massive success story in West Virginia business. He serves as the CEO of Wincore, whose logistics have been widely praised and the company boasts a week turnaround on orders. The company opened with 50 employees and now has over 300. Under Mr. Barton's guidance, Wincore has become one of the fastest growing companies in the region.

**Randall Holden, President**

Randall Holden is also a founding partner of Wincore Windows and has been with WV Potato Chip Company since its inception. He is the President of the Company and has been instrumental to its early success. Like Mr. Barton, Mr. Holden also has years of industry experience in his time with Wincore and possesses an impressive mind for business.

**Michele O'Connor, West Virginia Jobs Investment Trust**

Michele O'Connor has more than 25 years' experience in the finance and banking industry. She attained her Certified Financial Planner designation along with the Accredited Investment Fiduciary Manager designation. She was the Portfolio Manager for the Trust Department at First United Bank and managed over \$600 million for the department. Currently, she is the Investment Manager for the West Virginia Jobs Investment Trust, which is a leading venture capital firm focused on turning the innovation of new ideas into successful world-class companies. Ms. O'Connor graduated Magna Cum Laude with a BA in Finance from the University of Maryland College.

**Products**

WV Potato Chip's core business is the manufacturing and sale of potato chips. It purchases potatoes from Wisconsin-based Highland Lake Farms and Oneida Potato Exchange, and uses a brokerage firm to purchase potatoes from a co-op in Pennsylvania. When the Company receives potatoes, they clean them and slice them before cooking them in oil.

---





### Competition/Market Summary

The potato chip industry is currently dominated by the brands under PepsiCo, collectively known as Frito Lay North America, Inc. These brands include well known chips like Lay's, Ruffles, Fritos, Doritos and many others. Frito Lays North America generated \$14.1 billion in revenue during 2013 and reported a profit of more than \$3.8 billion. The next largest potato chip brand is Pringles, which is owned by Kellogg. The Utz brand of chips are currently in third place, followed by Cape Cod, Kettle, Herr Foods, Wise Foods, Snyder's of Hanover, Old Dutch Foods, and Snyder of Berlin. Frito Lay North America has a commanding hold over the market and there are no real large challengers among major corporations. Instead, most challengers to Frito Lay come in the form of small regional companies.

These small regional companies are all located outside of the State of West Virginia. However, for the most part, they are located very close to Parkersburg. Utz, a top-5 potato chip brand, is located 5 hours from the Mr. Bee's factory. Other brands like Herr's, Wise Snacks, Snyder's of Hanover, and Snyder of Berlin are all located in Pennsylvania as well. These companies are seen as the most direct challengers to the WV Potato Chip Company. Due to the size of Frito Lay North America's operations, there is very little chance that the Company could compete on the same level. Pennsylvania is home to 24 potato chip plants and Ohio is home to 10. In comparison, there are only 60 potato chip plants nationwide not owned by Frito Lay.

#### *Utz Quality Food, Inc.*

Utz was founded in 1921 by Bill and Salie Utz and is currently operated by the third generation of the Company, Mike and Jane Rice. According to their corporate website, Utz is the biggest independent privately held snack company in America. They make over a million pounds of chips each week and ships their product from Maine to North Carolina. In 2011, Utz's main line of potato chips had sales of \$137.6 million. Utz owns a distribution center in Fairmont and Parkersburg and can be found in stores throughout WV. It is the most successful of the smaller group of companies, narrowly edging out Cape Cod and Kettle in terms of sales in 2012 with over \$170 million in revenue. This number is still more than nine times less than what Frito Lay North America made in 2012.

#### *Herr's Food*

Herr's food was founded by James Stauffer Herr in 1946 when he was only 21 years old. His grandson, James M. Herr has been running the Company since 2005. Herr has an office in Ona, West Virginia as well as Chillicothe, Ohio. Their main line of chips had revenues of \$61.1 million in 2011, putting it behind brands like Utz, Kettle, and

---



Cape Cod. Like Utz, Herr's is also distributed throughout the State of West Virginia and has been a very successful brand.

### Conn's Potato Chips

Conn's Potato Chips is located nearby in Zanesville, Ohio, which is only an hour and a half drive from Parkersburg. It was founded in 1935 by the Conn family. The brand focuses on their brand of chips as well as private label branding. Owners Montie Hunter and Tom George, Sr. have recently built a new 100,000 square foot facility. Conn's was recently featured in a video segment for AOL.

### Industry Summary

The FDA plans to ban foods with artificial trans-fat by June 18, 2018. Doctors say trans-fat is the worst kind of fat and is a major contributor to heart disease, the leading cause of death in both men and women. That's why the FDA announced in June 2015 a nationwide phasing out of processed trans-fat. Manufacturers will have three years to remove partially hydrogenated oils from products. The agency estimates the elimination of artificial trans-fat will prevent 20,000 heart attacks and 7,000 deaths attributed to heart disease.

FDA isn't the first to limit trans-fats. New York City, in 2006 under Mayor Michael Bloomberg, passed a ban that applied to restaurants, and California followed suit in 2008. Cooking times and recipes had to be changed but doughnut makers and other restaurants reported making the adjustment.

The local bans set the precedent for the FDA's move, but the federal government's decision has much broader implications, especially if it can be interpreted to mean there is no safe level of trans fat, said Michael Reese, an attorney and partner at Reese LLP, a firm that regularly sues food companies for misleading consumers.

The food industry has been preparing for the trans-fat crackdown for months. As POLITICO reported, the Grocery Manufacturers Association has led a behind-the-scenes effort to craft a petition asking FDA to allow "very limited" uses of partially hydrogenated oils going forward.

The details of the industry's food additive petition have not yet been released. FDA officials told reporters they expect to be able to review the petition within the three-year compliance window. In the meantime, food companies are bracing for lawsuits.

### Significant Events

**June 2015:** The Company has attracted new investors who offered to purchase WVJIT's Series A Preferred Units and warrants. The transaction is expected to close mid-July 2015. The Series A Preferred Units and Warrants will be purchased for \$325,000.

**December 2014:** The Company was approved to engage StandOut Marketing, using OA funds to assist the marketing and branding of Mister Bee.

**March 2014:** The Company is working with WVJIT's legal counsel to correct/update membership issues discovered at the December 2013 board meeting.

---



**December 2013:** Sales were down compared to previous year (same period), but due to a cooker fire, WV Potato Chip was not able to offer specials. In addition, the Company was working through the set-up of a new distribution contract with Snyder's. Those two issues contributed to the lower sales. The Company and its accountant were working with the insurance company to settle its claim and to determine what the insurance company will pay on the lost sales.

The Company's sales mix continued to reflect Walmart and Kroger taking a lion share of the distribution with 30% and 12%, respectively, followed by GoMart, Foodland, and Snyder's.

**September 2013:** The chips are being made in the WV plant. The cooker was replaced and up and running. Snyder's picked up several routes and planned to expand the sales territory. Management expected the Snyder's distribution contract to double their current production. Production would increase from its current 2 days to 4 days.

**June 2013:** WV Potato Chip, LLC closed on funding transaction with WVJIT. Company experienced a cooker fire in their Parkersburg plant location.

#### **Overall Conclusion**

Based on the foregoing, the WV Jobs Investment Trust finds it most appropriate to record its investment in WV Potato Chip Company, LLC at value, which is currently presumed to be the same as cost or **\$312,012** per the GASB 62 Adjustment.

---



**Snapshot:**

Company: **WV Therapy, LLC**  
Website: **odysseyrehab.com**  
Location: **Bridgeport, WV**  
Total Employees: **FT/128; PT/101**  
WV Employees: **FT/128; PT/101**

**WVJIT Investment: \$0**  
**WVJIT Ownership: 0.0%**  
**Subject to GASB 62: NO**

**Leadership**

**Greg Hayes, President**  
**Dr. Jack A. Spatafore, Vice President**  
**George W. Wyatt, Chief Financial Officer**  
**Amy Dotson, VP of Administration**  
**Ester Jones, VP of Operations**  
**Mike Dotson, VP Sales and Marketing**

**Background**

WV Therapy Services, LLC, founded in 2006 and based in Bridgeport, WV, currently partners with 21 healthcare providers in various West Virginia locations where 329 full and part time employees provide quality Physical Therapy, Occupational Therapy and Speech Therapy services to meet the needs of their patients. The company also provides comprehensive management of the healthcare providers' rehab department. This management allows the healthcare provider to concentrate on other important aspects of their organization. The Company went through a rebranding and now does business as Odyssey Rehabilitation.

**WVJIT Investment History**

- **July 2012**
  - **\$500,000** Secured Note, 9% Interest w/monthly payments
  - Maturity: August 17, 2014 – Full payoff received.

**Total WVJIT Loan: \$500,000** (Funded through WVCAP)

**WVJIT FY2015 Interest Revenue Received: \$32,603.07**

**Co-Investors/Lenders**

Greg Hayes  
Jack Spatafore



**Management**

**Greg Hayes, President**

Greg Hayes has an extensive background in Physical Therapy. In 2006, he started West Virginia Therapy Services. Mr. Hayes also has ownership shares in Fairmont Appliance & TV Sales, LLC and Double D Appliance Repair, LLC. Mr. Hayes attended Fairmont State and received an Associate's degree as a Physical Therapist Assistant. He worked for a contract therapy company as a Regional Assistant Manager for West Virginia before starting WV Therapy Services.

**Dr. Jack A. Spatafore, Vice President**

Dr. Jack Spatafore helped to establish WV Therapy Services in 2006. He is also is a part owner of Bridgeport Physical Therapy. Dr. Spatafore has a Master's of Science in Exercise Physiology from WVU and a Doctorate of Physical Therapy from Shenandoah University and is an active member of WV Physical Therapy Board of Directors.

**George W. Wyatt, Chief Financial Officer**

George Wyatt is currently the Managing Partner of Post-Acute Professionals. Previously he was the Chief Financial Officer for Functional Pathways and has many years of experience in the financial management of contract therapy providers.

**Amy Dotson, VP of Administration**

Amy Dotson attended WVU and Fairmont State prior to joining the Company in 2008. She assisted with the initiation of a full benefit program.

**Ester Jones, VP of Operations**

Ester Jones joined the Company in 2008. She has a B.S. in Medical Technology and a Masters in Occupational Therapy from WVU and is a licensed Occupational Therapist and a current member of the American Occupational Therapy Association. She assisted with the installation of Therapute Billing software system and is also the instructor for the CEU program.

**Mike Dotson, VP of Sales and Marketing**

Mike Dotson joined the Company in 2010 with an extensive background in the pharmaceutical industry and sales.

---

### Products

Odyssey offers to children and adults holistic and medical Physical, Occupational and Speech therapy. Types of services and amenities include:

- Fall prevention
- Restraint reduction
- Quarterly screens
- Quality indicator management
- Monthly chart audits
- Assistance in the development of restorative nursing programs, such as:
  - Walking programs
  - Dining programs
  - Contracture management
- MDS quality management
- Third party consulting services
- Facility training annually
- Annual seminars/sessions to facility staff on preventing back injuries (free of charge to the facility)
- Billing software
- Therapute software management



### Odyssey and Accelerated Care Plus (ACP)

Odyssey Rehabilitation specializes in offering rehabilitation programs that optimize patient outcomes and reduce the routine cost of equipment. Through ACP, Odyssey Rehabilitation has programs available to enhance clinical outcomes for a variety of neurological and musculoskeletal conditions including:

- \* Acute and chronic wounds
- \* Edema (swelling)
- \* Chronic pain
- \* Contractures (loss of joint motion)
- \* Urinary incontinence
- \* Muscle re-education
- \* Falls
- \* Neurological and stroke motor dysfunction
- \* Dysphagia (difficulty swallowing)
- \* Post-surgical recovery



### Competition/Market Summary

Odyssey Rehabilitation has competed on a daily basis in the WV Long Term care marketplace since its inception in 2006. This market currently has approximately 140 Nursing Homes and 48 Hospitals. Of those 140 Nursing Homes, 53 of them are owned by corporations such as Genesis, Aegis and HCR Manor Care who provide their own

---



therapy services within the facility. This leaves the potential business in the WV marketplace in the nursing home market at 87. Currently, Odyssey contracts with nursing facilities for a market share of a little more than 14%. In the hospital market, WV Therapy currently services for a market share in excess of 8%.

As Odyssey Rehabilitation implements its plan for growth with the rebranding strategy from WV Therapy Services, they plan to market their services into surrounding states. Odyssey recently obtained a contractual relationship in Virginia, and intends on contracting with other surrounding states such as Ohio, Maryland, Kentucky, and Pennsylvania in the future.

#### **Industry Summary**

The U.S. outpatient rehabilitation market is estimated to be a \$19 billion industry with a projected annual growth rate of five percent or higher. The sector is also highly fragmented, with no company controlling significant market share. Given the aging and active US population, the demographics favor a sustained growth in patients seeking or requiring rehabilitation services. Also increasing numbers of Americans who engage in fitness regimens, coupled with increasing numbers of weekend warriors, is driving increased demand for physical therapy and rehabilitation treatments across the U.S. The most common conditions treated with physical therapy and rehab are lower back pain, spine, shoulder and rotator-cuff injuries, knee disorders as well as sprains and strains of various types. With pressures to lower patient costs across the board, private insurers and government health programs are increasingly turning to low cost/high quality outpatient providers.

#### **Significant Events**

**2015:** WV Therapy repaid its loan to WVJIT.

**2014:** WV Therapy was working with Citizen's Bank of Weston to re-write its existing loan to pay-off WVJIT's Loan.

**2013:** WV Therapy increased their existing line of credit to fund its continued growth and expansion.

**2012:** WV Therapy used loan proceeds to continue to expand into new markets. The Company opened in seven new locations.

#### **Overall Conclusion**

The Company paid off its loan and interest to WVJIT.

Based on the foregoing, the WV Jobs Investment Trust finds it most appropriate to record its investment in WV Therapy Services, LLC at value, which is currently presumed to be the same as cost or \$0.

---

### Companies Funded through West Virginia Jobs Investment Trust (WVJIT)

