

Building Partnerships to Address the Workforce Needs of the Grape and Wine Industry

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Agenda

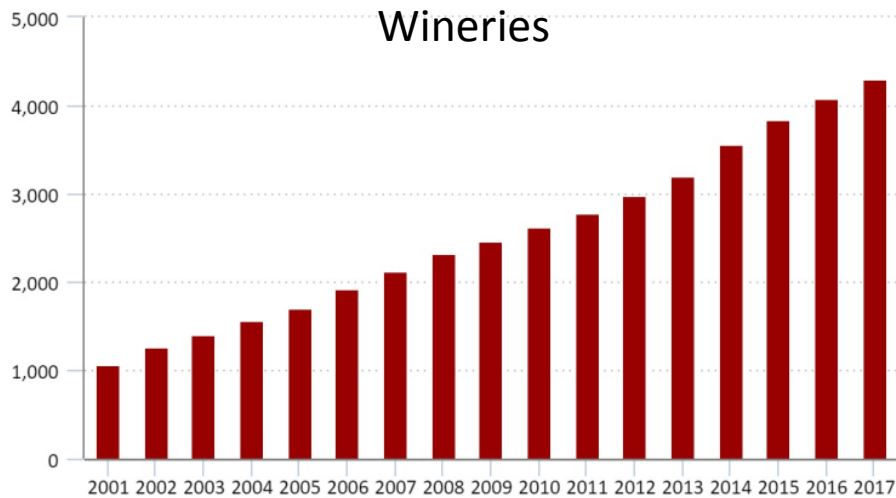
- U.S. Industry – GDP and Jobs
- U.S. Grape and Wine Industry
 - Economic Impact and Jobs
 - Challenges to Sustaining Growth
- Building Partnerships
- Identifying the Workforce Needs
- Workforce Development Resources
- Assessing the Capabilities and Barriers to Building Partnerships

2016 U.S. and Industry Sectors

GDP and Jobs

	<u>Gross Domestic Product</u> (Billions)	<u>% GDP</u>	<u>Jobs</u> (Millions)	<u>% Jobs</u>
Total U.S.	\$18,715,000		123.76	
Manufacturing	\$1,980,244	10.6%	12.30	9.9%
Construction	\$621,451	3.3%	6.71	5.4%
Agric., Forestry, Fishing & Hunting	\$26,888	0.14%	2.35	1.9%

Growth of the U.S. Grape and Wine Industry 2001 - 2017





What's in a Bottle of Wine? \$219.9 Billion!

The Wine Industry Boosts the United States Economy

\$219.9 Billion

Total Economic Impact

10,236 Wine Producers

in All 50 States

677,581 Vineyard Acres

1.7 Million Jobs

\$75.8 Billion

in Annual Wages

43 Million

Tourist Visits

\$17.7 Billion

Tourist Expenditures

\$31.3 Billion

Total Taxes

\$18.1 Billion

Federal Taxes

\$13.2 Billion

State and Local Taxes



2017 Economic Impact Report on American Wine Industry
Prepared by John Dunham & Associates, New York
For methodology or additional information visit wineamerica.org
Photos by Randy Tagg. Design by Book Marshall
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U.S. Grape and Wine Industry

Top 10 States for Wineries

States	Wineries ⁹	Econ. Impact (\$ B) ⁹	Winery & Vineyard Jobs ⁹	Ind. Assoc. ¹⁰	V&E Colleges ¹¹	VESTA Students ¹²
U.S. Total	10236	\$220	109525	125	38	1910
California	4581	\$71	67865	54	4	91
Washington	837	\$10	9267	7	3	22
Oregon	814	\$7	7445	7	2	9
New York	450	\$14	3889	3	2	40
Texas	394	\$13	2332	2	2	40
Virginia	272	\$5	1881	3	2	28
Pennsylvania	257	\$5	1244	1	1	13
Ohio	223	\$6	1215	1	1	135
Michigan	195	\$5	1388	2	2	191
Missouri	165	\$3	1130	3	1	381
Top 10 Total	8188	\$138	97656	83	20	950
% of U.S. Total	80%	63%	89%	66%	53%	50%

Challenges to the Grape and Wine Industry

- Environmental
- Regulatory
- Changes in Consumers
- Grape Acreage
- Workforce Availability
 - 2019 Low Unemployment Rate
 - 90+% of GWI are Small Businesses

Workforce Challenges for the Grape and Industry

- With this increased growth (of the Ohio grape and wine industry) has come many challenges for our wineries and vineyards including difficulties in recruiting, training and retaining employees.

Christy Eckstein, Executive Director, Ohio Grape Industries Committee

- Sustaining the growth of the Oklahoma grape and wine industry is threatened by shortage of skilled workers for our vineyard and wineries. Recently, we have seen a small number of wineries close because of their inability to find and keep skilled workers.

Cynthia Duncan, President, Oklahoma Grape Industry Council

- One of the key challenges to the continued growth of the Missouri industry is workforce. In today's tight labor Market, it is becoming increasingly difficult to hire and retain employees with the requisite knowledge, skills and experience.

Jim Anderson, Executive Director, Missouri Wine and Grape Board

U.S. Wine Industry *

Year	Number of Wineries **	Small Wineries ***
2017	9,091	96%
2016	8,702	97%
2015	8,287	97%
2014	7,762	96%
2013	7,498	96%

** January Statistics in winesandvines.com

*** Production less than 50,000 cases per year

Organizations with a Workforce Development Mission

- Federal
 - U.S. Department of Labor
 - U.S. Department of Agriculture
 - National Science Foundation
- States
 - Department of Economic Development
 - Department of Labor and Workforce Development
 - Department of Agriculture
 - Department of Higher Education and Workforce Development
- Workforce Development Boards
- American Job Centers

U.S. Department of Labor

- Workforce Investment Opportunities Act (WIOA)
- Department of Labor Office of Apprenticeship
- Funding to States
 - State Agency with Workforce Development Mission
 - State and Regional Workforce Development Boards
 - American (Local) Job Centers



- Established by the U.S. Department of Labor in 1937
- Offers an industry-proven approach for preparing workers for careers while meeting employers' need for a highly-skilled workforce
- Employer-driven unique flexible program
- Combines job specific On-the-Job Learning (OJL) with Related Technical Instruction (RTI)
- Apprentice's wages progressively increase as skill levels increase

Fiscal Year 2018 State Totals

State Name	Active Apprentices
State Name	Active Apprentices
Alabama	4,130
Alaska	1,946
Arizona	4,111
Arkansas	5,750
California	89,949
Colorado	6,315
Connecticut	5,528
Delaware	1,394
District of Colombia	9,214
Florida	12,207
Georgia	8,529
Guam	767
Hawaii	7,499
Idaho	1,434
Illinois	15,905
Indiana	16,973
Iowa	7,971

State Name	Active Apprentices
State Name	Active Apprentices
Kansas	2,135
Kentucky	3,674
Louisiana	3,868
Maine	602
Maryland	8,567
Massachusetts	12,096
Michigan	20,576
Minnesota	12,793
Mississippi	2,293
Missouri	14,599
Montana	1,920
Nebraska	1,591
New Hampshire	2,776
New Jersey	7,729
New Mexico	2,284
New York	18,337
North Carolina	7,039

State Name	Active Apprentices
State Name	Active Apprentices
North Dakota	1,038
Ohio	19,081
Oklahoma	1,516
Oregon	9,609
Pennsylvania	17,948
Puerto Rico	10
Rhode Island	2,026
South Carolina	20,763
South Dakota	526
Tennessee	5,590
Texas	17,767
Utah	3,532
Vermont	1,783
Virginia	11,971
Washington	16,622
West Virginia	4,358
Wisconsin	11,124
Wyoming	402

Federal Data: Active Apprentices by Industry for Fiscal Year 2018

Industry Title	Active Apprentices
Construction	166,629
Military (USMAP)	98,435
Public Administration	19,447
Manufacturing	15,630
Transportation and Warehousing	12,335
Utilities	7,281
Health Care and Social Assistance	4,507
Educational Services	3,690
Retail Trade	3,545
(not listed)	3,262
Wholesale Trade	2,193
Other Services (except Public Administration)	1,195
Information	1,152
Administrative and Support and Waste Management and Remediation Services	1,067
Accommodation and Food Services	761
Agriculture, Forestry, Fishing and Hunting	761
Professional, Scientific, and Technical Services	493
Mining, Quarrying, and Oil and Gas Extraction	425

Registered Apprenticeships for the Grape and Wine Industry



EMPLOYER : EMPLOYEE
WIN : WIN

Key Roles within Registered Apprenticeships

Employers (OJT)

- Must have employer(s)
- Must Drive Program Design / RTI
- Provider of OJT/Work-Based Learning

Sponsors (Intermediaries)

- Responsible for Administering the Pgm
- Can be Employer, Consortia of Employers, Industry Associations, Joint Labor-Management Organizations, Educational or Training Providers, CBOs, or Other Workforce Intermediaries!

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Supportive Services

- Can bring together a range of other entities to complement program design and to support apprentices and industry partners.

Educational (RTI) Provider

- Can be employer/industry based
- Can be Joint Labor-Mgmt Orgs
- Community Colleges
- Others



Employers

WIN : WIN

Employees

- Recruit and train new talent
- Train existing staff
- Reduce turnover
- Increase productivity, skills and responsibilities
- Match employee skills to job specifications



- Earn a paycheck from day one
- Learn a skill or trade through on the job training and the potential to earn college credit
- Succeed in a long-term career while earning a competitive salary
- Increase wages as skill level increases
- Receive a nationally-recognized certificate

Challenges for Establishing Registered Apprenticeships for the GWI

- Limited GWI Jobs Approved for Registered Apprenticeships
- Lack of Recognition of Need for Registered Apprenticeships in the GWI
 - Priorities often are for Manufacturing, Health Care, IT, Transportation and Logistics
- Availability of Related Technical Instruction Eligible for WIOA Funding
- Employers
 - Hesitant to Become Involved in Federal Government Sponsored Programs
 - Time and Effort Requirements for Employers and Employees
 - Reporting Requirements
 - Compliance with Federal Regulations
- Finding Individuals Interested in Becoming Registered Apprentices
- Need for Services and Funding to Support Employers and Apprentices

REGISTERED APPRENTICESHIP PARTNERS INFORMATION DATA SYSTEM

RAPIDS

RAPIDS CODE	O*NET-SOC CODE	OCCUPATIONAL TITLE	TERM	TYPE OF TRAINING	BULLETIN(S)
2046CB	45-2011.00	AGRICULTURAL COMMODITY GRADER	*CB	CB	17-01
0703	37-3012.00	AGRICULTURAL SERVICE WORKER	4000	TB	96-03
0871	39-2011.00	ANIMAL TRAINER	4000	TB	
2048HY	37-3013.00	ARBORIST	560-700	HY	17-17
0886	11-9013.02	BEEKEEPER	8000	TB	79-62
1124	51-9012.00	CELLAR WORKER (Wine)	2136	TB	07-08
2019HY	11-9013.02	DAIRY GRAZIER	4000	HY	13-20
0630	19-4021.00	DAIRY TECHNOLOGIST	8000	TB	
0187	49-3041.00	FARM EQUIPMENT MECHANIC I	6000	TB	
0789	49-3041.00	FARM EQUIPMENT MECHANIC II	8000	TB	
0981	45-2091.00	FARM WORKER, GENERAL I	2000	TB	84-22
0177	11-9013.02	FARMER, GENERAL (Agric)	8000	TB	
0902	33-3031.00	FISH & GAME WARDEN (Gov Ser)	4000	TB	82-23
1024	45-2093.00	FISH HATCHERY WORKER	2000	TB	98-08
0214	51-6052.00	FURRIER	8000	TB	
0934	37-3011.00	GREENSKEEPER II	4000	TB	78-42
0245	51-6041.00	HARNESS MAKER	6000	TB	
0591	47-4099.00	HAZARDOUS-WASTE MATERIAL TECHNICIAN	4000	TB	90-04
0831	51-7041.00	HEAD SAWYER	6000	TB	80-44
1001	39-2011.00	HORSE TRAINER	2000	TB	86-14
0235	39-2021.00	HORSESHOER	4000	TB	
0236	19-1013.00	HORTICULTURIST	6000	TB	
0271	37-3011.00	LANDSCAPE GARDENER	8000	TB	
0574	37-3011.00	LANDSCAPE MANAGEMENT TECHNICIAN	2000	TB	89-14
0571	37-3011.00	LANDSCAPE TECHNICIAN	4000	TB	89-14
0900	45-4021.00	LOGGER, ALLROUND	4000	TB	79-23
0299	49-3042.00	LOGGING-EQUIPMENT MECHANIC	8000	TB	
0307	49-9041.00	MAINT MECHANIC (Grain & Feed)	4000	TB	78-14
0487	51-6041.00	SADDLE MAKER	4000	TB	
0450	19-1031.01	SOIL CONSERVATION TECHNICIAN	6000	TB	80-45
0562	27-1012.00	TAXIDERMIST (Profess & Kin)	6000	TB	
0595	37-3013.00	TREE SURGEON	6000	TB	
0607	37-3013.00	TREE TRIMMER (Line Clear)	4000	TB	90-17
1112CB	31-9096.00	VET./LAB ANIMAL TECH (Alt. Title: Animal Care Specialist)	*CB	CB	06-23, 11-06
0034	11-3051.00	WINE MAKER (Vinous Liquor)	4000	TB	



- Established in 2003 through a Grant from the Advanced Technological Education (ATE) Program of the National Science Foundation
- Currently an ATE National Center with 20 Colleges and Universities in 16 states
- Mission - Addressing the Workforce Needs of the U.S. Grape and Wine Industry
- Strategies
 - Provide 34 Industry-validated Online Courses in Viticulture, Enology and Wine Business Entrepreneurship
 - Provide Mentored Field Experiences and Workshops

Addressing GWI Workforce Needs

- 1910 Students from 47 states, DC and 13 foreign countries have enrolled in VESTA courses
- Over 600 Vineyards and Wineries in 39 states across the U.S. have agreed to serve as Field Practicum Sites
- VESTA Students are working throughout the U.S. GWI and several have established commercial operations

Workforce Development Highlights 2018 – 2019

- Received a Grant from the MO Division of Workforce Development to Assist the MO GWI to establish Registered Apprenticeships
- Received Approval from U.S. DOL Office of Apprenticeships for Missouri State University to Serve as a Sponsor of Registered Apprenticeships
- VESTA is collaborating with Colleagues in Iowa and Michigan to Increase the GWI Occupations Approved for Registered Apprenticeships

Grape and Wine Production Occupations

- Winery Manager
- **Winemaker (2)**
- **Assistant Winemaker (2)**
- Laboratory Manager
- Laboratory Technician
- Cellar Manager
- **Cellar Worker (1)**
- Bottling Line Worker
- Equipment Operator
- Tasting Room Manager
- **Tasting Room Associate (1)**
- **Vineyard Manager (2)**
- Viticulturist
- Vineyard Technician
- **Vineyard Foreman (2)**
- **Vineyard Worker (1)**
- Pest Control Supervisor
- Equipment Operator
- **Production Technician (2)**
Implemented in Michigan and Missouri

(Term of Registered Apprenticeships in Years)

Registered Apprenticeships for the GWI

- Registered Apprenticeships
 - 2018 – 2 in RAPIDS* in 2018
 - Wine Maker (Vinous Liquors)
 - Cellar Worker (Wine)
 - Active RAs ~ 12 in IA and MI
 - 2019 – 8 Approved in MO, TN, and Available in Other States
 - Active RAs ~ 30 in IA, MI and MO
 - AWM, TRA, VM, VF, VW and Production Technician

TN and the Workforce Needs of the Grape and Wine Industry



What's in a Bottle of Wine? \$1.9 Billion!

The Wine Industry Boosts the Tennessee Economy

\$1.9 Billion

Total Economic Impact

67 Wine Producers

in Tennessee

488 Vineyard Acres

16,792 Jobs

\$641.0 Million

in Annual Wages

216,842

Tourist Visits

\$89.1 Million

Tourist Expenditures

\$245.2 Million

Total Taxes

\$140.8 Million

Federal Taxes

\$104.3 Million

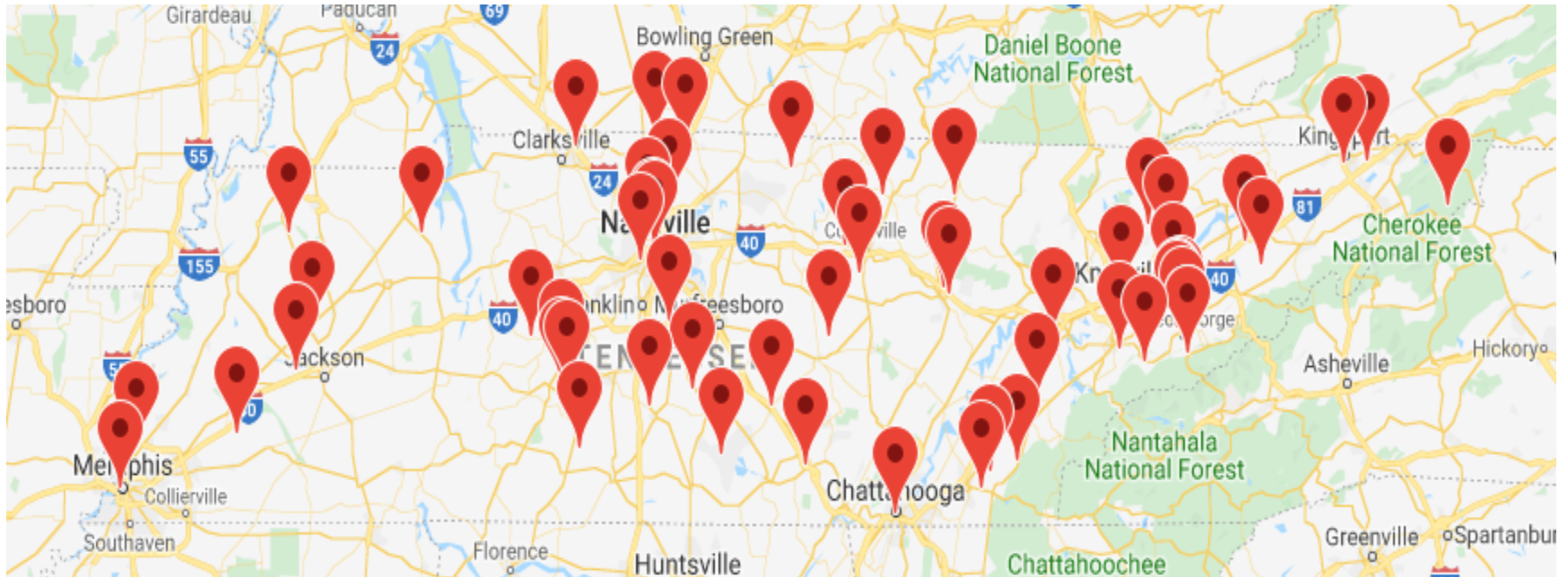
State and Local Taxes



- Wineries
 - 21 in 199
 - 67 in 2017
- Vineyard and Winery Jobs – 437
- Unemployment Rate – 3.5%
- Challenges to continued growth of the Tennessee grape and wine industry include finding and retaining workers.

*Adam Acampora, Executive Director,
Tennessee Farm Winegrowers Alliance*

Tennessee Wineries



Addressing these Challenges through Collaboration

- Increasing GWI Jobs Approved for RA programs
- Increasing Recognition of Need for RA in GWI
- Identifying Potential Support for Employers and Apprentices
- Recruiting New and Retaining Current Employees
- Establishing and Administering RA Programs

Identifying the Organizations & Champions in Tennessee

**TN Dept of Labor &
Workforce Development**

TN Board of Regents

TN Farm Winegrowers Alliance



TN Dept. of Agriculture

Pellissippi State CC

Key Steps in Addressing the Workforce Needs of the Grape and Wine Industry

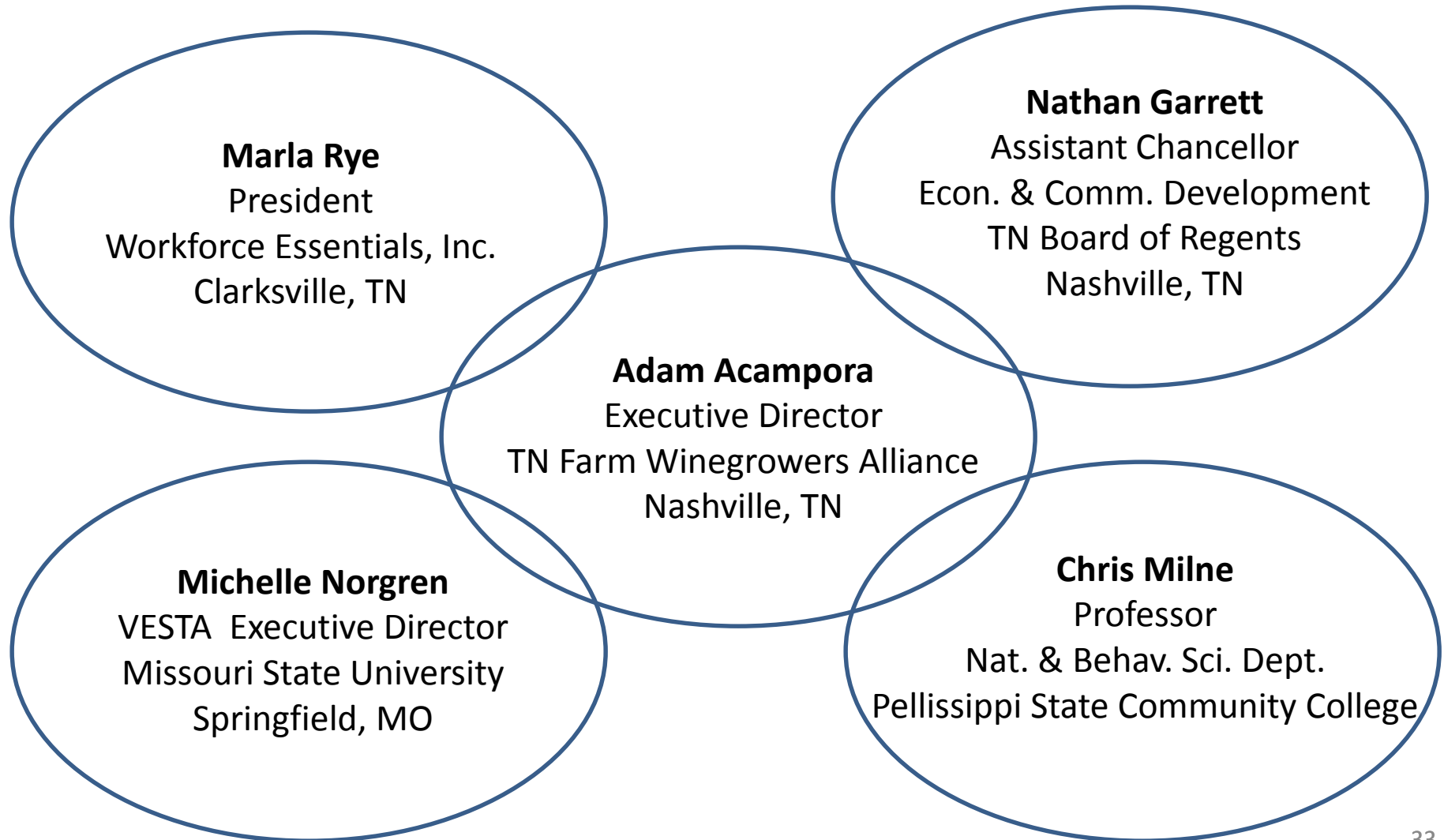
- Identifying the Workforce Needs
- Identifying the Organizations and Champions Who Can Address these Needs
- Identifying the Barriers to Collaboration
- Building a Partnership(s)
- Making it Happen

- 40 Community and Technical Colleges
- Registered Apprenticeships ~ 250 in 2019
 - Construction
 - Electricians
 - HVAC
 - Welding
 - IT
 - CNA
- Building a Strategy for the Future

Chronology of a Partnership

- Dec 2018 – Discussions with TN Farm Winegrowers Alliance representatives
- Feb 2019 – TN Farm Winegrowers Alliance Conference
 - VESTA, Registered Apprenticeships and TN Workforce Development Opportunities
- Spring 2019 – Teleconferences VESTA and TFWA
 - TN Depts. – Agriculture, Labor & Workforce Development
 - Pellissippi State Community College
- June 2019 – VESTA Summit – TFWA and PSTCC Representatives
- Sept 2019 – Memorandum of Agreement TN BR and VESTA
- Oct 2019 – Memorandum of Agreement PSTCC and VESTA
- Jan 2020 – Launch RAs for TN GWI – Phased Approach
 - Non-credit Program Sponsored by TN BR via VESTA
 - For-credit Program with PSTCC as the TN 2-year College Partner in VESTA

Finding the Champions



Grape and Wine Industry Base Pay for Small Wineries - 2018 ¹

Wineries ²	Locations of Wineries ²	Cost of Living Index ³	WBM Wine Maker	WBM Compared Vineyard Manager	Compared to Napa
California					
Domaine Caneros	Napa	177.5	105,334	87,561	
Ravenswood Winery	Sonoma	193.2		114,651	95,306
Klinker Brick Winery	Lodi	127.2		75,484	62,748
Castoro Cellars	Paso Robles	149.3		88,599	73,650
Tennessee					
Adkins Vineyards	Clarksville	92		54,596	45,384
Beans Creek Winery	Manchester	88.7		52,637	43,756
Burgner Vineyards	Greeneville	79		46,881	38,971
C & H Garden Vineyard	Jones	92		54,596	45,384
Century Farm Winery	Jackson	88.5		52,519	43,657
Grinder's Switch Winery	Centerville	90.7		53,824	44,742
Highland Manor Winery	Jamestown	82.9		49,195	40,895
Hillside Winery	Sevierville	94.1		55,842	46,420
Natchez Hills Winery	Nashville	110.4		65,515	54,460
Paris Winery	Paris	80.6		47,831	39,760
Sugarland Cellars	Gaitlinburg	90.2		53,527	44,496
Tsali Notch Vineyard	Madisonville	86.4		51,272	42,621

For More Information



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Sources of Data for Vineyard and Winery Salaries and Cost-of-Living

- 1 Wine Business Monthly Journal - October 2108 - Data Reported Feb 1, 2018 for annual base salary
Assume - Small Wineries - Produce under 50,000 cases per year
- 2 Locations of Wineries -Tennessee Wines.com
- 3 <http://www.bestplaces.net/cost-of-living/> 2019 Cost of Living Calculator

Industry Sectors

- 2016 U.S. Statistics
 - <https://www.statista.com/statistics/192356/number-of-full-time-employees-in-the-usa-since-1990/>
 - 123.6 Million Full-time Jobs
 - <https://countryeconomy.com/gdp/usa?year=2016>
 - GDP - \$18,715,000,000
- Agriculture, Forestry, Fishing and Hunting
 - <https://datausa.io/profile/naics/agriculture-forestry-fishing-hunting#workforce>
 - 2.35 Million Jobs
 - <https://fred.stlouisfed.org/series/NGMPFRSTFISHUSMP>
 - \$26,888,000,000
- Construction
 - <https://datausa.io/profile/naics/construction#workforce>
 - 6.71 Million jobs
 - <https://fred.stlouisfed.org/series/USCONSTRQGSP>
 - \$621,092,000,000
- Manufacturing
 - <https://datausa.io/profile/naics/manufacturing#workforce>
 - 12.3 Million Jobs
 - <https://fred.stlouisfed.org/series/USMANRQGSP>
 - \$1,980,244,000,000



Registered Apprenticeship

VESTA serves as a pathway for individuals interested in certificated training in viticulture and enology

VESTA is collaborating with industry associations, government agencies, colleges and universities, and related non-profit organizations to implement Registered Apprenticeships for vineyards and wineries using a unique and flexible employer-driven model that will enhance recruitment, advancement and retention of employees.

> REGISTERED APPRENTICESHIPS

> RESOURCES

> BUSINESS DEVELOPMENT RESOURCE DATABASE

> PRACTICUM SITES

EVENTS

DEC 07 2018 Wine Sensory Analysis Wor...
Dec 07, 18

[Event Calendar](#)

Sign up for our Newsletter

Email

WHAT IS A REGISTERED APPRENTICESHIP (RA)?

The U.S. Department of Labor (DOL) established this unique, flexible training program that combines job specific On-the-Job Learning with Related Technical Instruction over 80 years ago. At the end of FY 2017:

- There were 1,373 jobs were approved for RAs, but there were only two for the grape and wine industry (GWI) – Winemaker and Cellar Worker.
- There were 533,607 active RAs throughout the country, but less than 20 for the GWI – all in Iowa and Michigan.

Employer is the one who:

- Determines the type of occupations, length of RA programs, and education and competencies needed
- Determines qualifications for apprentices, wages, and hiring/firing conditions
- Identifies sources of education and specific requirements for Related Technical Instruction
- Hires the Apprentice
- Awards credit for relevant prior education and experience
- Provides On-the-Job Learning by pairing an Apprentice with a Mentor
- Oversees progress of the On-the-Job Learning and Related Technical Instruction

Apprentice is a full-time Employee who:

- Participates in On-the-Job Learning – 2,000 hours of work annually
- Participates in a recommended minimum of 144 hours of Related Technical Instruction
- Receives wage increases commensurate with achieving competencies

FIELD PRACTICUM MENTOR



VESTA Field Site Mentor

The hands-on field practicum is an integral part of the VESTA online educational program. Listen to this winery/vineyard owner talk about the benefits of these practical experiences to both the student and the industry mentor.