Mary Ball Washington GO Virginia Region 6
Summary of Stakeholder Meetings

Top photo by Ken Lund.

August 14, 2017

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Stakeholder Engagement Summary

As part of the Economic Growth and Diversification Plan, input from regional stakeholders and industry experts was gathered. This input validates identified priority target industry sectors and provides additional information regarding regional challenges and opportunities associated with their development.

Invitations were sent to a target list of stakeholders, including local elected officials, local economic development professionals, local administrators, colleges and educational institutions, workforce development professionals, local chamber of commerce, as well as industrial development authorities (IDA) / economic development associations (EDA) within each planning district commission (PDC). Upon consultation with the PDC's stakeholder workshops were scheduled:

MPPDC		GWRC		NNPDC
June 28: 2-4 PM Rappahannock Community College Glenns Campus 12745 College Dr. Glenns, VA 23149	**JUNE 28: 7-9 PM** Middle Peninsula Planning District Commission 125 Bowden Street Saluda, VA 23149	**June 29: 2-4 PM** Bowling Green Town Hall 117 Butler St. Bowling Green, VA 22427	**June 29: 7-9 PM** George Washington Regional Commission 496 Princess Anne St Fredericksburg, VA 22401	**July 17: 3-5 PM** The Transportation Building 73 Monument Pl. Heathsville, VA 22473

Additional meetings were held with the Fredericksburg Regional Alliance (FRA) "Pros" on July 6th, the Chief Administrative Officers in GWRC on July 7th, and the Middle Peninsula Planning District Commission (MPPDC) Local Government Administrators on July 14th.

PDC Stakeholder Meetings

For each PDC stakeholder workshop, the Project Team followed an agenda (Appendix A) to gather specific information regarding assets, challenges as well as economic successes. The Project Team also presented stakeholders with two presentations. The first (Appendix C), provided an overview of the GO Virginia purpose and process, while the second (Appendix D)

provided an overview of Regional Economic Conditions as well as an Industry Cluster Analysis. Please see Appendix E for meeting sign in sheets.

Based on facilitated discussions stakeholders identified regional target industries/sectors, key assets, challenges and regional success (i.e. Headline News). For comparison, Tables 1 through 4 list responses from PDC stakeholders regarding the respective topic of interest.

The participants in each session were asked to identify those industries or industry sectors or industry clusters that had potential for growth in the region, particularly those industries that had the greatest likelihood to generate higher paying jobs than the median wages for that PDC.

The Participants were then asked to identify those regional assets that could be leveraged to accelerate the growth of the target industries/sectors. In addition to the assets the participants were asked to identify the challenges or barriers that limit the future growth of the target industries/sectors that were identified.

Lastly but not least, the stakeholders were asked to project 10 years into the future and visualize what success would look like in this region as a result of the GO Virginia efforts. The participants were asked to develop a series of local newspaper headlines on the success of the GO Virginia program in the Mary Ball Washington Region. This exercise is a way to identify what the participants would desire as outcomes from GO Virginia investments in the region. These statements will be used to develop a vision for the region and establish goals to be achieved.

Table 1: Target industries/sectors identified by regional stakeholders at the workshops.

TARGET INDUSTRIES/SECTORS		
MPPDC	**GWRC**	**NNPDC**
Meeting 1: ▪ Tourism ▪ Solar ▪ Marina/boating industry (diesel mechanics, welders) ▪ Forestry ▪ Natural resource based industries ▪ Water as a commodity ▪ Resilience R & D ▪ Communications Center ▪ Education Centers- IT ▪ Home Office ▪ Security ▪ Seafood, aquaculture, commercial fishing ▪ Advanced Manufacturing – natural resource based ▪ Value added processing Meeting 2: ▪ Aquaculture – i.e. mobile processing, shrimp, etc. ▪ Forestry – i.e. NVA pellets, laminated timbers, etc. ▪ Storm water commerce ▪ Value Added Agriculture - wood based chemicals	Meeting 1: ▪ Solar ▪ Commercialization of Dahlgren Research ▪ Incubation and Acceleration ▪ Innovation and Research ▪ Warehousing and Transportation ▪ Broadband ▪ Professional services Meeting 2: ▪ Tourism ▪ Professional Services ▪ Finance and insurance ▪ Manufacturing ▪ Transportation and warehousing	Meeting 1: ▪ Manufacturing – expanding existing industry ▪ Commercial fishing – product diversification ▪ Forestry – product diversification ▪ New small professional services businesses o Parma o Research commercialization – Dahlgren and Quantico

Common Themes – Target Industries/Sectors

The following are a list target clusters/industries that emerged from the stakeholder meetings that were held across the region:

- **Natural Resource Based industries – product diversification**
    - Seafood/aquaculture/commercial fishing
    - Forestry, wood products, pulp
    - Marine research
    - Resiliency/marine construction
    - Agriculture
- **Manufacturing**
    - Food and beverage
    - Fabricated metals
- **Distribution/Logistics**
- **Information**
    - Data Centers
- **Finance and Insurance**
- **Professional Services**
    - Defense/security
    - Home based businesses
    - Research Commercialization
        - Quantico, Dahlgren, NASA, VIMS
- **Tourism**

Table 2: Regional assets by regional stakeholders at the workshops.

ASSETS		
MPPDC	**GWRC**	**NNPDC**
Meeting 1: ▪ Natural Resources ▪ Trainable workforce ▪ Trainable workforce ▪ Waterfront property ▪ History ▪ Educational facilities ▪ Water ▪ Educational Institutions (RCCC & VIMS) ▪ Trained Workforce ▪ Quality of Life (Low crime, etc.) ▪ Land Potential – low density ▪ Proximity to Metro areas ▪ Retirees who volunteer talents and skills ▪ Wood base ▪ Water (Salt) ▪ Seafood ▪ Proximity DC/Richmond/HRE DA ▪ Aged population – with liquidity ▪ Open land ▪ Volunteer Community ▪ Waterways ▪ American history ▪ College is "reasonable" ▪ Attractive Life style	Meeting 1: ▪ Military presence ▪ Lots of Land ▪ History ▪ Brainpower ▪ Location ▪ Located near Policy Makers (State and Federal) ▪ University of Mary Washington and Germanna CC ▪ Road Network ▪ Population increases ▪ Outside of blast zone ▪ Transit opportunity ▪ Quality of life ▪ Recreation opportunities ▪ Quality of life ▪ Education and culture – UMW and Community Colleges ▪ Commuters and workforce ▪ Incubators ▪ Transportation network (i-95, 301, US 1 & rail) ▪ Cost of living and housing ▪ Cost of power ▪ Rural Horseshoe Initiative ▪ Rappahannock River Meeting 2: ▪ Education (Germanna CC and UMW) ▪ Historic assets ▪ Natural resources (rivers) ▪ Health care institutions	Meeting 1) ▪ Retirees – talent pool and wealth pool ▪ Regional technical school ▪ RCC ▪ Abundant natural resources ▪ Cost of living

Table 2: Regional assets by regional stakeholders at the workshops.		
ASSETS		
	▪ Transportation ▪ Military installations ▪ Diverse population ▪ UMW ▪ Rappahannock River ▪ Location between DC and Richmond ▪ Germanna CC ▪ Historic location ▪ Plenty of room for growth ▪ Business friendly state- lower taxes (double edged sword)	

Common Themes – Assets

The following are common assets that were mentions frequently during the various stakeholder meetings that were held across the region:

- **Abundant Natural Resources**
- **Talented Workers (often out-commuters)**
- **Strong Educational Institutions – University of Mary Washington, Germanna Community College, Rappahannock Community College, VIMS, etc.**
- **Low Cost of Doing Business**
- **Modest Cost of Living**
- **Retirees – Wealth and Talent Pool**
- **Location – Center of Urban Crescent**
- **Extensive Transportation Infrastructure**

Table 3: Challenges identified by regional stakeholders at the workshops.

CHALLENGES		
MPPDC	**GWRC**	**NNPDC**
Meeting 1: ▪ Lack of Broadband Access ▪ Opposition to economic development/change ▪ Environmental regulations ▪ Lack of infrastructure – water, sewer and storm sewer ▪ Retaining college graduates ▪ Primary schools (workforce attraction) ▪ Regulations ▪ Lack of infrastructure ▪ Interest access ▪ Demand of services from retirees ▪ Aging population ▪ Losing younger population ▪ NIMBY ▪ Tax rates by sector ▪ Potable water ▪ Aging population – loss of $ ▪ Lack of young population for workforce ▪ Broadband ▪ Dwindling boating industry ▪ Volunteer community ▪ Lack of broadband ▪ Lack of water and sewer infrastructure ▪ NIMBY ▪ Matching Economic Development needs for	Meeting 1: ▪ Lack of Broadband Access ▪ Traffic congestion ▪ Workforce development – limited workforce ▪ Level 1 Trauma Center ▪ Regional Cooperation ▪ Less Federal Spending ▪ Education ▪ Lack of Transit options ▪ Number of Out commuters ▪ Waterway dredging ▪ Site Ready opportunities ▪ Lack of Performing Arts ▪ Lack of Venture Capital ▪ Access to Broadband ▪ Traffic Congestion ▪ Parochialism – Lack of Regionalism ▪ Lack of Research University ▪ Meaningful Engagement with Military Installations ▪ Upward mobility within industrial clusters ▪ Alignment of workforce programs with private sector ▪ Regional communication ▪ Lack of population in rural areas Meeting 2: ▪ Gap in workforce development ▪ Broadband access ▪ Traffic/Transportation options ▪ Alignment of workforce training/education and jobs	Meeting 1) ▪ Lack of high-speed broadband service ▪ Millennials leaving ▪ Work force challenges ▪ Pass the drug test ▪ Need soft skills ▪ Lack of certain technical skills – welders, truck drivers, etc. ▪ Stop teaching to the test and start teaching four basic skills – critical thinking, communication, collaboration, etc. ▪ Schools need to elevate the quality of education provided ▪ Need to establish collaboration between key business employers and the school system

Table 3: Challenges identified by regional stakeholders at the workshops.		
CHALLENGES		
workers to student interests	▪ Regional competition ▪ Transportation and transit ▪ Broadband ▪ Workforce training (jobs gaps) ▪ Cultural Opportunities – entertainment for millennials – theater/arts/museum	

Common Themes – Challenges

The following are a list of common challenges that emerged from the various stakeholder meetings that were held across the region:

- **Lack of High-Speed BROADBAND**
- **Out-commuting of Talented Workers**
- **Workforce Gaps and Limitations**
    - Soft skills
    - Mid-level skills
- **Lack of Infrastructure – water, sewer, storm water**
- **Transportation Congestion/Lack of Transportation Options**
- **Mismatch Between Business Skills Requirements and Education Pipeline**
- **Lack of Cultural Offerings for Younger Workforce**
- **Lack of Ready Source of Venture Capital**
- **Limited Number of Quality Sites and Buildings**
- **Lack of Collaborative/Progressive/Regional Attitude**

Table 4: Regional Successes identified by regional stakeholders at the workshops.

HEADLINE NEWS		
MPPDC	**GWRC**	**NNPDC**
Meeting 1: ▪ Regional Training Center recognized as State's Best ▪ College grads find new opportunities in Middle Peninsula ▪ Remember when all we talked about was the internet? ▪ "starved for Funds" Middle Peninsula ▪ Crime remains low ▪ School populations continue to decline ▪ Riverside Walter Reed becomes regional medical center ▪ R & D explodes in Middle Peninsula ▪ 10th brewery opens in Middle Peninsula ▪ Rt. 17 opens as 4- lane across Eastern VA ▪ Middle Peninsula is top tourist destination ▪ ROI on GO Virginia exceeded 100% of investment ▪ Millennials ▪ High schoolers receive first in nation combination boat/drivers license ▪ Rural Coastal VA stormwater revenues save	Meeting 1: ▪ Fredericksburg Regional designated MSA ▪ Region opening workforce training ▪ Region "finally" has adequate broadband ▪ Region population surpasses 1 million ▪ Region becomes new lab for Tech Transfer ▪ Region surpasses NOVA in data Center Development ▪ Washington Region no longer a commuting nightmare ▪ Commuter rail service expanded to southern part of region ▪ Region sets record for Tourism revenues ▪ Region designated MSA ▪ State/local governments partner with private sector to provide broadband access ▪ Region tops VA in wage growth ▪ 16,000 jobs now open ▪ Fredericksburg no favorite City for millennials ▪ Fredericksburg to Dahlgren bike trail opens Meeting 2: ▪ Infrastructure – Broadband and Bridges constructed ▪ Research Triangle comes to	Meeting 1: ▪ Northern Neck Recognized for its Career and Technical Education Program connecting area employers to high school students. ▪ Northern Neck Innovation Network helps new aspiring young entrepreneurs build thriving professional services businesses and provides work space at the Innovation Center. ▪ High school robotics team wins national honors. ▪ Northern Neck population between 20 to 50 years of age increased by 10% over the last 10 years. ▪ The Northern Neck celebrates the final deployment of high-speed broadband Internet service to all areas of the region. ▪ The Northern Neck celebrates 10 years of

Table 4: Regional Successes identified by regional stakeholders at the workshops.		
HEADLINE NEWS		
Commonwealth ▪ West Rock is still Here ▪ 2026- MP is America's Corridor – history, environment, talent, research ▪ Home – based businesses on the rise with expansion of broadband – national recognition ▪ Plant needs new employees for expanding production	Fredericksburg Region ▪ Smart Growth Wins – Diversity of housing types – Land Planning- Density – transit ▪ FRED bus ridership increases 500% ▪ Trails and brews pubs put Fredericksburg on the man ▪ Tourism Regional Authority records record attendance ▪ Regional cooperation builds economy	Entrepreneurship Center operation.

Common Themes – Success

The following is a list common themes that emerged from the stakeholder meetings that were held across the region that relate to the "success" of the GO Virginia program investments after 10 years:

- **Metropolitan Statistical Area (MSA) Designation**
- **Complete High-speed Broadband Coverage throughout the Regions**
- **Tourism Expansion**
- **Significant Increase in Home-based Businesses**
- **A Robust system of Entrepreneurship Support**
- **A Workforce Training and Education System that Continually Meets the Needs of Regional Employers – Large and Small**
- **Center(s) of Innovation Created**
- **Accelerated Job and Wage Growth Across the Region**
- **A New Era of Regional Cooperation and Collaboration**

Other Meetings

In addition to the PDC stakeholder meetings, the Project Team held meetings with the Fredericksburg Regional Alliance (FRA) "Pros", the Chief Administrative Officers in GWRC, and the Middle Peninsula Planning District Commission (MPPDC) Local Government Administrators.

The meeting with the FRA "Pros", followed the agenda in Appendix B and focused on the opportunities to expand business and innovation. Summary points from the meeting included:

- Target industries/sectors
  - Manufacturing
  - Information - Data centers
  - Distribution/Logistics
  - Finance and Insurance
  - Professional services - defense related contractors partnering with locally based contractors - commercialization of patents from Dahlgren and other military installations (Redstone/Huntsville model)
  - Food Processing
- Don't have the product (sites and buildings) to support expansion of the target industries
- Don't have venture capital sources to support start-up or scale-up businesses
- Existing accelerator, Quantico Innovation Center, is supporting new companies that are spin-offs of existing defense contractors
- Broadband access is a major priority

The meeting with the Chief Administrative Officers in GWRC identified three issues for the region:

1) need for broadband, both availability and speed;
2) lack of natural gas service to industrial properties; and
3) the need to focus on expansion of the professional services sector.

Appendix A: Agenda for Stakeholder Workshops

GO Virginia
Mary Ball Washington Region (Region 6)
Stakeholder Workshop
AGENDA

I. Introduction
II. Purpose and Process of GO Virginia
III. Overview of Regional Economic Development Plans
IV. Overview of Regional (sub-regional) Economic Conditions
V. Regional (sub-regional) Industry Cluster Analysis
VI. Workforce Gaps Analysis
VII. Key Assets for Economic Growth – Facilitated Discussion
VIII. Challenges/Barriers to Economic Growth – Facilitated Discussion
IX. Success – What Does the Future Look Like? – Facilitated Discussion
X. Adjourn

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Appendix B: Agenda for Pros Meeting

GO – Virginia – Mary Ball Washington Region
FRA – Pros Meeting
July 6, 2017

Topics of Discussion

- GO Virginia Overview
- Growth and Diversification Plan – Region 6
- FRA Target Overview
- Regional Clusters
- Business Expansion/Creation Environment
    - Product- Sites and Buildings
        - Availability/Quality/Distribution
    - Workforce
        - Alignment of Workforce Training and Education Programs
    - Cost of Doing Business
        - Incentives – technology zones/tourism development zones/fast-track permitting/etc.
    - Innovation Support
        - UMW SBDC
        - Incubators/Accelerators
    - Research Commercialization

Appendix C: Presentation for PDC Stakeholder Workshops – Part 1: Purpose & Process

Mary Ball Washington Region GO Virginia - Region 6

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Community Futures

GO Virginia - Overview

- **Purpose:**

Create more and higher paying jobs through incentivized collaboration, primarily from out-of-state revenue, which diversifies and strengthens regional economies.

GO Virginia - Overview

- "Higher Paying Jobs" – Above median wages for the sub-region (PDC)
- "Basic Industry" – Business where revenues are derived primarily form out-of-state sources

GO Virginia - Overview

- Regions

GO Virginia - Overview

- **Funding:**

	FY 2017	FY 2018	Total
Capacity Building	$3,600,000	$2,250,000	$5,850,000
Formula Allocation		$10,900,000	$10,900,000
Competitive		$11,300,000	$11,300,000
Total	**$3,600,000**	**$24,450,000**	**$28,050,000**

GO Virginia - Overview

- **Region 6 - Funding**
- Capacity Building
  - FY 2017 - Up to $400,000
  - FY 2018 - $250,000, $ for $ Match
- Formula Allocation
  - FY 2018 - $500,00 approx. + capacity building carryover – $ for $ match

GO Virginia - Mary Ball Washington Regional Council (MBWRC)

Functions:

- Prepare/Adopt Economic Growth and Diversification Plan
- Solicit, Evaluate and Recommend Projects for Funding
- Monitor Projects and Impact on the Region

MBWRC - Economic Growth and Diversification Plan

- Phase I - Data Analysis
  - Existing Plans Review
  - Economic Conditions/Drivers
  - Cluster Analysis
  - Workforce Gaps Analysis
- Phase II – Stakeholder Engagement
- Phase III - Growth Sector Consultation
- Phase III – Plan Preparation/Adoption

Review of Existing Regional Plans

- Plans Reviewed
  - Fredericksburg Region Industry Cluster Study (2013)
  - George Washington Region Transportation Opportunities for Regional Economic Growth (2013)
  - Fredericksburg Regional Commuter Workforce Skills Study (2016)
  - Report of the Cardinal Team, Fredericksburg Regional Alliance (2015)

Review of Existing Regional Plans

- Plans Reviewed (cont.)
  - Northern Neck Comprehensive Economic Development Strategy (2013)
  - Stronger Economies Together (SET) Northern Neck Economic Development Plan 2013-2018
  - Northern Neck Tourism Plan (2010)
  - Middle Peninsula of Virginia Comprehensive Economic Development Strategy (2017)

Review of Existing Regional Plans

- **Plans Reviewed (cont.)**
  - Bay Consortium (LWDA XIII) Local Plan 2017-2021
  - Fort A.P. Hill Joint Land Use Study (2014)
  - Marine Corps Base Quantico Joint Land Use Study (2014)
  - Naval Support Facility (NSF) Dahlgren Joint Land Use Study (2015)

Review of Existing Regional Plans – FRA Cluster Analysis

Cluster	Employment (Total)	Average Wage (Annual)	Job Growth (10 Yr. - %)
Public Administration	11,741	$87,203	2.3%
Health and Life Sciences	11,270	$25,706 assisted living workers $85,105 physicians	4.0%
FIRE	7,671	$47,810	2.3%
Business Services	6,925	$54,822	3.5%
Information and Communications	4,811	$73,418	4.2%
Manufacturing	3,229	$63,949	3.5%

Review of Existing Regional Plans – Major Industry Sectors

Bay Consortium
Retail Trade
Health Care and Social Assistance
Accommodation and Food Services
Educational Services
Public Administration

GWRC
Public Administration
Health & Life Science
Finance, Insurance, Real Estate
Business Services
Information & Communication
Manufacturing

NNPDC
Retail Trade
Real Estate, Rentals & Leasing
Health Care & Social Assistance
Accommodation and Food Services
Agriculture, Forestry, Fishing, and Hunting

MPPDC
Government
Retail Trade
Local Government
Health Care & Social Services
Accommodation and Food Services

Review of Existing Regional Plans

- **Common Themes**
  - Need to Expand Economic Development Activity
  - Stem Out-commuting
  - Tourism Opportunity
  - Broadband Deployment
  - Workforce Development Alignment

Thank You

Neal J. Barber
President
804-761-0186
nealbarber1944@gmail.com

Community Futures

Appendix D: Presentation for the FRA "Pros"- PART 2: Economic Profile and Industry Clusters

Private Employment by Major Industries in 2016:Q4 – Region 6
0
5,000
10,000
15,000
20,000
25,000
Retail Trade 22,506
Health Care & Social Assistance 19,088
Accommodation & Food Services 16,189
Professional, Scientific, & Tech. Services 9,137
Construction 8,085
Finance & Insurance 7,745
Other Services (except Public Admin.) 6,035
Manufacturing 5,792
Administrative & Support & Waste Mgmt. 5,413
Transportation & Warehousing 4,536
Wholesale Trade 3,974
Arts, Entertainment, & Recreation 2,180
Real Estate & Rental & Leasing 1,842
Management of Companies & Enterprises 1,746
Educational Services 1,722
Information 1,188
Agriculture, Forestry, Fishing & Hunting 975
Utilities 499
Mining, Quarrying, & Oil & Gas Extraction 178
Data Source: Virginia Employment Commission

Private Avg. Weekly Wages by Major Industries in 2016:Q4 – Region 6
$0
$500
$1,000
$1,500
$2,000
Utilities $1,600
Professional, Scientific, & Tech. Services $1,590
Mining, Quarrying, & Oil & Gas Extraction $1,280
Management of Companies & Enterprises $1,268
Finance & Insurance $1,113
Educational Services $1,061
Information $1,019
Manufacturing $988
Wholesale Trade $979
Construction $942
Transportation & Warehousing $901
Health Care & Social Assistance $900
Real Estate & Rental & Leasing $744
Agriculture, Forestry, Fishing & Hunting $721
Administrative & Support & Waste Mgmt. $616
Retail Trade $548
Other Services (except Public Admin.) $537
Arts, Entertainment, & Recreation $339
Accommodation & Food Services $317
Data Source: Virginia Employment Commission

1 yr. Growth in Private Employment by Major Industries in 2016:Q4 – Region 6
-1,000
-500
0
500
1,000
1,500
Transportation & Warehousing 1,147
Administrative & Support & Waste Mgmt. 438
Construction 261
Real Estate & Rental & Leasing 211
Other Services (except Public Admin.) 209
Manufacturing 161
Accommodation & Food Services 153
Finance & Insurance 38
Educational Services 35
Health Care & Social Assistance 19
Mining, Quarrying, & Oil & Gas Extraction -4
Arts, Entertainment, & Recreation -5
Utilities -6
Management of Companies & Enterprises -15
Agriculture, Forestry, Fishing & Hunting -40
Professional, Scientific, & Tech. Services -130
Information -186
Wholesale Trade -406
Retail Trade -716
Data Source: Virginia Employment Commission

5 yr. Growth in Private Employment by Major Industries in 2016:Q4 – Region 6
-500
0
500
1,000
1,500
2,000
Accommodation & Food Services 1,544
Transportation & Warehousing 1,353
Administrative & Support & Waste Mgmt. 1,034
Health Care & Social Assistance 744
Construction 713
Other Services (except Public Admin.) 630
Finance & Insurance 485
Arts, Entertainment, & Recreation 472
Educational Services 429
Manufacturing 313
Real Estate & Rental & Leasing 285
Retail Trade 33
Mining, Quarrying, & Oil & Gas Extraction 9
Utilities 1
Professional, Scientific, & Tech. Services -47
Agriculture, Forestry, Fishing & Hunting -100
Management of Companies & Enterprises -104
Wholesale Trade -239
Information -341
Data Source: Virginia Employment Commission

Private Employment by Major Industries in 2016:Q4 – MP
0
1,000
2,000
3,000
4,000
Retail Trade 3,780
Health Care & Social Assistance 3,041
Accommodation & Food Services 2,197
Manufacturing 1,777
Construction 1,289
Other Services (except Public Admin.) 936
Administrative & Support & Waste Mgmt. 713
Wholesale Trade 703
Transportation & Warehousing 685
Professional, Scientific, & Tech. Services 639
Finance & Insurance 526
Agriculture, Forestry, Fishing & Hunting 393
Arts, Entertainment, & Recreation 303
Management of Companies & Enterprises 237
Real Estate & Rental & Leasing 223
Information 162
Educational Services 106
Mining, Quarrying, & Oil & Gas Extraction 72
Utilities 72
Data Source: Virginia Employment Commission

Private Avg. Weekly Wages by Major Industries in 2016:Q4 – MP
$0
$500
$1,000
$1,500
Utilities $1,398
Transportation & Warehousing $1,099
Professional, Scientific, & Tech. Services $1,065
Manufacturing $1,038
Finance & Insurance $933
Mining, Quarrying, & Oil & Gas Extraction $902
Construction $847
Wholesale Trade $841
Agriculture, Forestry, Fishing & Hunting $796
Health Care & Social Assistance $789
Management of Companies & Enterprises $717
Real Estate & Rental & Leasing $670
Educational Services $589
Administrative & Support & Waste Mgmt. $586
Information $576
Retail Trade $506
Other Services (except Public Admin.) $483
Arts, Entertainment, & Recreation $400
Accommodation & Food Services $272
Data Source: Virginia Employment Commission

1 yr. Growth in Private Employment by Major Industries in 2016:Q4 – MP
-400
-200
0
200
400
Transportation & Warehousing 368
Wholesale Trade 77
Other Services (except Public Admin.) 70
Administrative & Support & Waste Mgmt. 65
Accommodation & Food Services 37
Construction 28
Manufacturing 27
Finance & Insurance 8
Mining, Quarrying, & Oil & Gas Extraction 1
Educational Services -1
Utilities -1
Agriculture, Forestry, Fishing & Hunting -7
Real Estate & Rental & Leasing -13
Management of Companies & Enterprises -16
Information -24
Arts, Entertainment, & Recreation -29
Health Care & Social Assistance -44
Professional, Scientific, & Tech. Services -67
Retail Trade -208
Data Source: Virginia Employment Commission

5 yr. Growth in Private Employment by Major Industries in 2016:Q4 – MP
-200
0
200
400
600
Health Care & Social Assistance 489
Transportation & Warehousing 406
Administrative & Support & Waste Mgmt. 255
Manufacturing 67
Other Services (except Public Admin.) 62
Wholesale Trade 52
Accommodation & Food Services 43
Mining, Quarrying, & Oil & Gas Extraction 41
Agriculture, Forestry, Fishing & Hunting 17
Utilities 2
Professional, Scientific, & Tech. Services -8
Information -11
Construction -18
Arts, Entertainment, & Recreation -32
Educational Services -35
Real Estate & Rental & Leasing -43
Management of Companies & Enterprises -88
Finance & Insurance -91
Retail Trade -133
Data Source: Virginia Employment Commission

Unemployment
12%
10%
8%
6%
4%
2%
0%
2012:M4
2012:M9
2013:M2
2013:M7
2013:M12
2014:M5
2014:M10
2015:M3
2015:M8
2016:M1
2016:M6
2016:M11
2017:M4
VA
Region 6
GWRC
MP
NN
Data Source: Virginia Employment Commission

Economic Drivers

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Performance Metrics

- Employment Location Quotient (w = 12.5%)
- Short-Term (1 yr.) Abs. Employment Growth (w = 12.5%)
- Long-Term (5 yr.) Abs. Employment Growth (w = 12.5%)
- Short-Term (1 yr.) % Wage Growth (w = 6.25%)
- Long-Term (5 yr.) % Wage Growth (w = 6.25%)
- Wage Relative to Region/PDC Average (w = 12.5%)
- % of Industry Output Exported (w = 18.75%)
- Type 1 Employment Multiplier (w = 18.75%)

Example: Region 6

Industry	LQ	ST Emp. Δ	LT Emp. Δ	ST Wage. Δ	LT Wage. Δ	Rel. Wage	Export %	Mult.
Paper mills	1.31	NA	NA	NA	NA	NA	99.1%	2.56
Grain farming	12.70	9	53	19.9%	81.9%	1.16	94.8%	1.74
Pump and pumping equipment manufacturing	0.16	13	NA	76.3%	NA	1.42	99.5%	1.77
Other fabricated metal manufacturing	0.91	49	NA	233.5 %	NA	1.45	96.3%	1.28
Wood preservation	4.30	23	49	-1.3%	30.2%	0.94	90.1%	2.43

Example: Region 6

Industry	LQ	ST Emp. Δ	LT Emp. Δ	ST Wage. Δ	LT Wage. Δ	Rel. Wage	Export %	Mult.
Paper mills	41						17	7
Grain farming	2	46	44	20	12	52	41	26
Pump and pumping equipment manufacturing	158	33		3		32	5	23
Other fabricated metal manufacturing	72	16		1		28	35	92
Wood preservation	6	29	46	96	51	100	46	8

Example: Region 6

Rank	Industry	Average Score
1	Paper mills	30.75
2	Grain farming	32.56
3	Pump and pumping equipment manufacturing	33.31
4	Other fabricated metal manufacturing	38.38
5	Wood preservation	41.94

Industry Clusters

Cluster 101

- Difference between an industry cluster and a key industry sector
- Supply/Distribution Chains (Fesser & Berman)
- Traded Clusters vs. Local Clusters (Porter)
- Clusters are geographically specific
- Bottom-up approach to deriving clusters
- Top-down approach to deriving clusters

Our Cluster Method

- Bottom-up
- Identify regional and PDC driver industries
- Categorize driver industries by cluster
- Quantify regional supply/distribution chains

Identified 16 Traded Clusters in Region 6

- Agriculture
- Mining and quarrying
- Utilities
- Food and beverage manuf.
- Wood product and paper manuf.
- Plastic, rubber, and non-metallic mineral product manuf.
- Fabricated metal and machinery product manuf.
- Computer and electronic product manuf.

Identified 16 Traded Clusters in Region 6

- Miscellaneous manuf.
- Wholesale trade
- Transportation and warehousing
- Information
- Finance and insurance
- Professional services
- Education
- Tourism

Identified 4 Local Clusters in Region 6

- Retail
- Business support services
- Health care
- Consumer services

Agriculture

Industry	Region 9	GWRC	MP	NN
Aquaculture			X	X
Commercial fishing				X
Commercial logging	X		X	X
Grain farming	X	X	X	X
Greenhouse, nursery, and floriculture production		X		
Oilseed farming	X	X	X	X

Agriculture

Industry	Region 9	GWRC	MP	NN
Aquaculture			X	X
Commercial fishing				X
Commercial logging	X		X	X
Grain farming	X	X	X	X
Greenhouse, nursery, and floriculture production		X		
Oilseed farming	X	X	X	X

Agriculture

Industry	Region 9	GWRC	MP	NN
Aquaculture			X	X
Commercial fishing				X
Commercial logging	X		X	X
Grain farming	X	X	X	X
Greenhouse, nursery, and floriculture production		X		
Oilseed farming	X	X	X	X

Food and Beverage Manuf.

Industry	Region 9	GWRC	MP	NN
Bread and bakery product, except frozen, manufacturing	X	X		
Breweries	X	X		X
Dry pasta, mixes, and dough manufacturing	X	X		
Frozen cakes and other pastries manufacturing	X	X		
Manufactured ice	X	X		X
Seafood product preparation and packaging	X		X	X
Wineries	X	X		X

Food and Beverage Manuf.

Industry	Region 9	GWRC	MP	NN
Bread and bakery product, except frozen, manufacturing	X	X		
Breweries	X	X		X
Dry pasta, mixes, and dough manufacturing	X	X		
Frozen cakes and other pastries manufacturing	X	X		
Manufactured ice	X	X		X
Seafood product preparation and packaging	X		X	X
Wineries	X	X		X

Food and Beverage Manuf.

Industry	Region 9	GWRC	MP	NN
Bread and bakery product, except frozen, manufacturing	X	X		
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Frozen cakes and other pastries manufacturing	X	X		
Manufactured ice	X	X		X
Seafood product preparation and packaging	X		X	X
Wineries	X	X		X

Wood Product and Paper Manuf.

Industry	Region 9	GWRC	MP	NN
All other miscellaneous wood product manufacturing	X	X		
Cut stock, resawing lumber, and planing	X	X		
Other millwork, including flooring	X	X		
Paper mills	X		X	
Prefabricated wood building manufacturing	X	X		
Sawmills	X	X	X	X
Wood container and pallet manufacturing	X	X		
Wood preservation	X	X	X	X
Wood windows and door manufacturing	X	X		

Wood Product and Paper Manuf.

Industry	Region 9	GWRC	MP	NN
All other miscellaneous wood product manufacturing	X	X		
Cut stock, resawing lumber, and planing	X	X		
Other millwork, including flooring	X	X		
Paper mills	X		X	
Prefabricated wood building manufacturing	X	X		
Sawmills	X	X	X	X
Wood container and pallet manufacturing	X	X		
Wood preservation	X	X	X	X
Wood windows and door manufacturing	X	X		

Transportation and Warehousing

Industry	Region 9	GWRC	MP	NN
Couriers and messengers	X	X	X	
Scenic and sightseeing transportation and support activities for transportation	X	X	X	
Truck transportation	X	X	X	
Warehousing and storage	X	X		
Water transportation	X		X	

Transportation and Warehousing

Industry	Region 9	GWRC	MP	NN
Couriers and messengers	X	X	X	
Scenic and sightseeing transportation and support activities for transportation	X	X	X	
Truck transportation	X	X	X	
Warehousing and storage	X	X		
Water transportation	X		X	

Transportation and Warehousing

Industry	Region 9	GWRC	MP	NN
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Scenic and sightseeing transportation and support activities for transportation	X	X	X	
Truck transportation	X	X	X	
Warehousing and storage	X	X		
Water transportation	X		X	

Professional Services

Industry	Region 9	GWRC	MP	NN
Advertising, public relations, and related services	X		X	
Architectural, engineering, and related services	X	X	X	
Computer systems design services				X
Custom computer programming services		X		X
Environmental and other technical consulting services	X		X	
Legal services				X
Management consulting services	X	X	X	
Management of companies and enterprises		X		X
Other computer related services, including facilities management		X		X
Scientific research and development services	X	X	X	

Professional Services

Industry	Region 9	GWRC	MP	NN
Advertising, public relations, and related services	X		X	
Architectural, engineering, and related services	X	X	X	
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Custom computer programming services		X		X
Environmental and other technical consulting services	X		X	
Legal services				X
Management consulting services	X	X	X	
Management of companies and enterprises		X		X
Other computer related services, including facilities management		X		X
Scientific research and development services	X	X	X	

Wood Product and Paper Manuf. Regional Supply/Distribution

Core Industries
All other miscellaneous wood product manufacturing
Cut stock, resawing lumber, and planing
Other millwork, including flooring
Paper mills
Prefabricated wood building manufacturing
Sawmills
Wood container and pallet manufacturing
Wood preservation
Wood windows and door manufacturing

Wood Product and Paper Manuf. Regional Supply/Distribution

Top Ten Regional Suppliers
Wholesale trade
Commercial logging
Sawmills
Management of companies and enterprises
Truck transportation
Electric power transmission and distribution
Cut stock, resawing lumber, and planing
Maintenance and repair construction of non-residential structures
Architectural, engineering, and related services
Rail Transportation

Wood Product and Paper Manuf. Regional Supply/Distribution

Top Ten Regional Customers
Sawmills
Wood preservation
Cut stock, resawing lumber, and planing
Engineered wood member truss manufacture
Owner occupied dwellings
Construction of new residential structures
Maintenance and repair construction of non-residential structures
Construction of other new non-residential structures
Real estate
Paper mills

Thank You
Dr. A. Fletcher Mangum
President
804-346-8446
fletcher@mangumeconomics.com
MANGUM
economics

Appendix E: Sign in Sheets from Meetings

Middle Peninsula Planning District Commission – Meeting at Rappahannock Community College

REGION 6 MID PEN GO VA
6/28/17

NAME	ORGANIZATION	EMAIL
JASON PERRY	RCC	jperry@rappahannock.edu
MIKE JENKINS	BAY WDB	mjenkins@baywib.org
TRENT FUNKHOUSER	ESSEX EDO	EDO@ESSEX-VIRGINIA.ORG
ED MILLER	KING & QUEEN	[illegible]
TRUDY FEIGUM	MPPDC	TRUDYF@REAGAN.CO
JOHN MEYER	Gloucester City	jmeyer@gloucestervа.info
MAC CASALE	DMBG Mathews	JAYCEC6@verizon.net
DAVE HANSEN	MWBDS · Dist 4	dhansen@kingwilliam
DONNA "DJ" Jackson	NNNews	djackson@northernneckness.com
Jimmy Sydnor	Town of Tappahannock	Tappzone@Tappahannock-va.com
Steve Goodall	West Rock	Stephen.Goodall@westrock.com
Tom Feigum	Middlesex EDA	
Frank A. Johnson, Jr.	www.hfbp.org	fjohnson@hfbp.org
Gordon E. White		gewhite@crosslink.net
Janet Riggs	Middlesex EDA	jriggsgpa@mcsoand.riggs.com
Carlton Revere	GO VA Vice Chair	carltonrevere@reveresw.com
ED MOREN	KING WM Co EDA	EHMJR2016@GMAIL.COM
GENE CAMPBELL	KING WM EDA	GENEC1781@GMAIL.COM
JOHN BREEDEN	King Wm Planning Com	JLWBreeden@gmail.com
Celane Roden	Middlesex EDA	celanem@yahoo.com
Michelle Brown	Middlesex Econ Dev + Tourism	m.brown@co.middlesex.va.us
Liz Porter	Middle Peninsula Alliance	Riverlinkllc@gmail.com

George Washington Regional Commission – Meeting at Bowling Green Town Hall

Go Virginia 6/29/17

Tim Ware	GWRC
Kate Gibson	GWRC
John Sieg	Town of BG EDA
Donna Lane	Town of Bowling Green EDA
Nancy Long	Caroline Co
Bill Freehling	Fredericksburg Econ. Dev
Angela Freeman	" "
Sharon Farmer	Town of Port Royal
Billy Zeke	Union Bank & Trust
Kent Farmer	TREC
Kim McClellan	FAHBA
Lisa Hull	MPED
Gary Wilson	Caroline Co. Econ Dev.
John Davis	Germanna CC
Bob Fuscialdo	KG EDA

George Washington Regional Council – June 29th Meeting At GWRC

GO VA - REGION 6
6/29/17

NAME	ORGANIZATION	EMAIL
TED HONTZ	SELF	tedhontz678@gmail.com
Carol Werle	Eco Dev Auth	cmwerle@verizon.net
Wanda Parrish	Spotsy. Planning Dept	wparrish@spotsylvania.va.us
Tim Duffy	Fredbg City Council	tpduffy@fredericksburg
Alex Long	Town Port Royal	ALONG@CCIM.NET va.gov
M.K. Greenlaw	City of Fredericksburg	
Meghan O'Connor	Spotsylvania Public Schools Career + Tech Ctr	MOCONNOR@SCPS.K12.va.us
Todd Romero	Spotsy Econ Dev & Tourism Dept	troman@spotsylvania.va.us

Fredericksburg Regional Alliance Pros Meeting – July 7, 2017

Alliance
Curry Roberts
Todd Gillingham
Kellyn Staneart
Guest
Debra Flippo – Draper Aiden
Carolyn Howard – Draper Aden Neal Barber David Zorn – Mangum Economics
Pros
Gary Wilson - Caroline
Debbie Sanders - Spotsylvania
Bruce Register - Stafford
Rick Cobert - Stafford
Bill Freehling – City of Fredericksburg
Angela Freeman – City of Fredericksburg
Ryan Gandy – King George

MANGUM economics

Northern Neck-Chesapeake Bay Region Partnership

Meeting Minutes
Monday, July 17, 2017, 3:00 p.m.
Northumberland Transportation Building, Heathsville VA 22473

	Lancaster County
	Frank Pleva, County Administrator
	William Lee, Supervisor
✓	Wally Beauchamp, Supervisor
✓	James N. Carter, Jr., Business Representative
✓	Paul Sciacchitano, Business Representative

	Northumberland County
✓	Luttrell Tadlock, County Administrator
	Ronnie Jett, Board of Supervisors
✓	Theresa Lambert, North. Co. Econ. Dev. Commission
	, Business Representative
	, Business Representative

	Richmond County
✓	Morgan Quicke, County Administrator
✓	Bob Pemberton, Board of Supervisors
	Rusty Brown, Business Representative
	Rick Cox, Business Representative
	Keith Whelan, Business Representative

	Westmoreland County
✓	Norm Risavi, County Administrator
✓	Russ Culver, Board of Supervisors
	William Sydnor, Citizen
	Iris Lane, Business Representative
	James Latane, Industrial Development Authority

	NNPDC Staff
✓	Jerry W. Davis, Executive Director
✓	Alex Eguiguren, Technical Assistant
✓	Lisa Hull, Economic Development Coordinator
	John Bateman, Planner

	Regional Groups Representatives & Guests
	Henry Lane Hull, NNPDC member
✓	Frank "Bert" Johnson, Jr., Hope for Family Pros.
✓	Ken Pollock, Bay Transit
	Jason Perry, RCC-Workforce
✓	Charlie Donato, Dominion Power
✓	Jake Salmons, Del. Ransone's office
✓	Bill Kling, Citizen
	Linda LaSut, VDOT
✓	Karen Hart, NNTC
✓	Mike Jenkins, Work Investment Board
✓	Wallace McGinness, Citizen
✓	Derwin Booker, NNSWCD
✓	Jim Howard, King George County
✓	Corinne Becker, Rice's Hotel/Hughlett's Tavern
✓	Dr. Elizabeth Crowther, President, RCC
✓	Alice Cooper, Lancaster Community Library
✓	John Cann, Lancaster Community Library
✓	David Mann, Virginia Employment Commission
✓	Charlotte Silverman, Citizen
✓	Ralph Millar, Citizen
✓	Patricia Lewis, Town of Montross
✓	Jane Crowther, Omega Protein
✓	Carry Holbrook, Carry-On Trailer
✓	Richard Carter, Citizen
✓	Tim Ware, Economic Development Admin.
✓	Terry Cosgrove, Town of Montross
✓	Morgan Wright, Wood Resources
✓	Ella Johnson, Citizen
✓	Steven Parker, Lancaster County Schools
✓	Gary Silverman, Citizen
✓	Cynthia Carter, Citizen
✓	Neal Barber, Community Futures
✓	Fletcher Mangum; Mangum Economics