

Maritime Education, Training, and Workforce Development for Shipbuilding: The Hampton Roads Maritime Training System

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Hampton Roads Workforce Council



Identify the Key Players & the Hub of the Ecosystem

HAMPTONROADS WORKFORCECOUNCIL

- The hub to many spokes and the regional convener of business, education & training, and the talent to fill these jobs



The Hampton Roads
Business Community

HAMPTONROADS WORKFORCECOUNCIL



Regional Education &
Training Providers



Job-Seekers,
Local & Otherwise



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Start to Generate Resources

The generation of resources (\$) is essential to success.
And you have to start somewhere.

In September 2020,
the Hampton Roads Workforce Council
was awarded a grant of **\$663,000**
by state funding mechanism GO Virginia
to launch the Maritime Talent Team.

Data Is Critical

Current Supply & Demand

	Welder	Shipfitter	Pipefitter	Marine Electrician	Inside Machinist	Outside Machinist	Preservation/ Coatings	NDT	Sheet Metal
Annual Collaborative Demand (~80%)	833	537	590	658	112	537	345	38	363
Estimated Regional Demand	1041	671	738	823	140	671	431	48	454
Specific Maritime Training (MTT & CTE) Capacity by Trade	2539	294	440	1754	138	325	408	0	636
Estimated Regional Deficit/Surplus	1498	-377	-298	931	-2	-346	-23	-48	182
Impact rating									



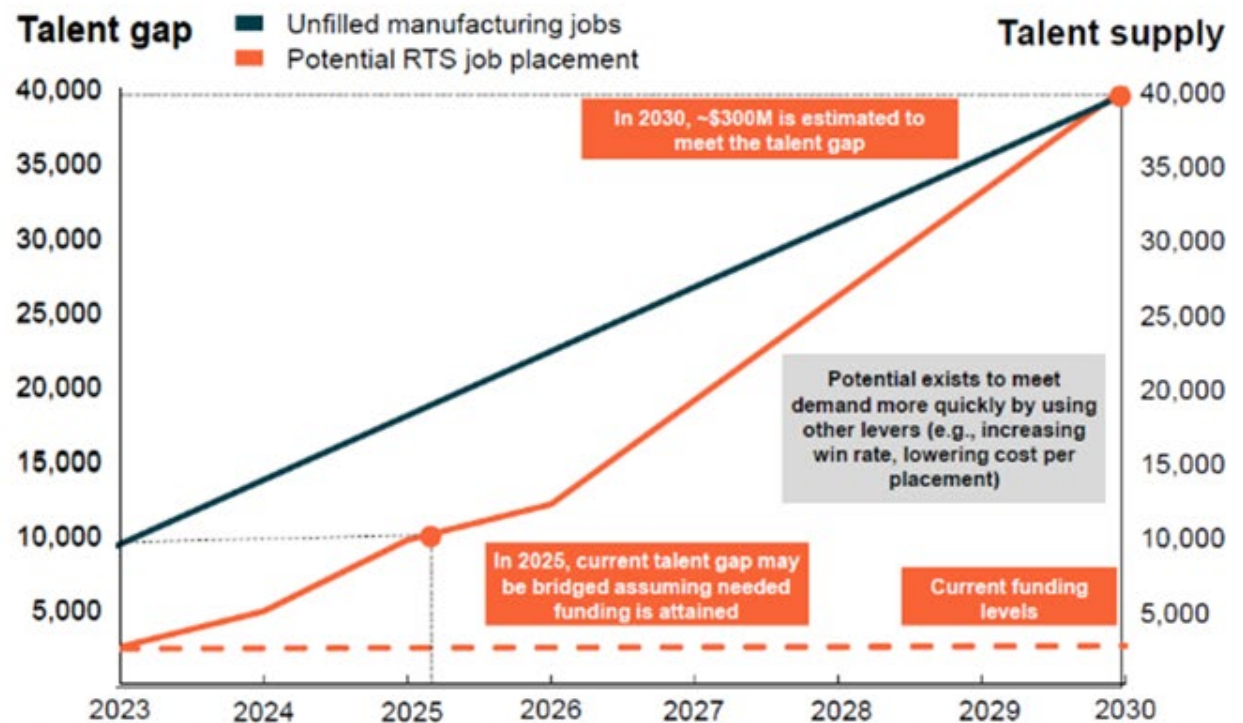
	Welder	Shipfitter	Pipefitter	Marine Electrician	Inside Machinist	Outside Machinist	Preservation/ Coatings	NDT	Sheet Metal	TOTAL
Specific Maritime Training Capacity by Trade	2539	294	440	1754	138	325	408	0	636	6534

Data Is Critical

2022 McKinsey & Co. Projections

Bridging the projected talent gap in 2030 would require ~\$300M in funding, averaging \$37.5M per year

While \$70-90M will help close the current talent gap, demand is increasing and ~\$300M will be required to catch up and truly close the anticipated, total growing gap by 2030¹



Funding needed to achieve impact	\$18M	\$36M	\$72M	\$90M	\$142.5M	\$195M	\$247.5M	\$300M
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1. Assumes \$7,500 per placement

8



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Build the System



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The HRMTS: end-to end support and service to our maritime industry's workforce needs

Data &
Assessment

Training
Capacity

Outreach &
Recruitment

Training
Funding

Case
Management

Curriculum

Instruction

Retention



Build the System

Data & Assessment

Training Capacity

Outreach & Recruitment

Training Funding

Current Activities

- Real-Time Supply/Demand Data
- Active Employer & Training Provider Collaboratives
- Training Throughput Data
- Identify and address training capacity gaps
- Trusted Advisors to MIB on Future Workforce Projects

- Make data-driven decisions based on supply & demand
- 6 MIB Projects underway to add 2,180 trades training slots by 2026

- Dedicated recruitment and outreach to targeted communities
- HRMTS K-12 & Veterans outreach
- Recruitment campaign with marketing partners

- >\$20M in non-MIB funding since 2023
- Federal (non-DOD), state, local, & private sources

The Road Ahead

- Expand collaboratives to more employers & training providers
- Start K-12 maritime collaborative
- Expand data / ROI measurement
- Evaluate of training providers
- Single Source of Truth Dashboard on regional training

- 8 additional MIB Projects in FY25 to add another 1,500-2,000 trades training slots by 2027
- Fill all new training capacity

- Extend and expand marketing campaign
- Target right audiences via microtargeting
- Streamline and scale up K-12 and Veteran programs
- Initiate out-of-market recruitment plan

- MIB FY25 project to ensure training availability
- Pursue braided funding streams
- Increase private donations to HRMTS



Build the System

Case Management

Curriculum

Instruction

Retention

Current Activities

- Case-managed 2,600+ participants since 2024
- Career Planners mitigate barriers to success

- Developed training curricula in high-demand trades in partnership with EB/NNS/MIB
- Analyze competencies and related training in Hampton Roads

- Establish regional assessment of instructor surplus / shortage numbers
- MIB project enhancing CC instructor wages to recruit talent

- Employers focus on retention to reduce demand on HRMTS and preserve institutional knowledge

The Road Ahead

- Continue to ensure training completion and job connections
- Partner with suppliers and maritime employers for job placement

- Ensure consistency and alignment with each training partner's curricula
- Disseminate EB/NNS-developed modules as open-source curricula

- Evaluate FY24 project (2.02) to enhance instructor salaries as pilot program for effectiveness towards stated goal
- Expand or pivot from the project in future FY
- Continue to work with veteran and retiree population to fill trainer need

- Offer Incumbent Worker (advanced) Training funding
- Address barriers like housing affordability, childcare, transportation, etc.
- Continue providing post-hire support/counseling



FY23 MIB Projects

No.	Project	Cost (MM)	Funding Recipient	Category	Project Status
1.02	Virginia Beach CTE Increased Welding Capacity	\$2.5	VBCPS	Infrastructure/Capacity	Complete
1.03	Camp Community College Maritime Trades Training Facility	\$3	CCC	Infrastructure/Capacity	Complete
1.04	VA Peninsula Community College Maritime Trades Training Facility	\$4.7	VPCC	Infrastructure/Capacity	In Execution
1.05	Curriculum Alignment & Standardization	\$8	NNS/EB	Infrastructure/Capacity	In Execution
1.06a	Planning Funding: Northern Neck Technical Center Governor STEM Academy for Agriculture & Maritime Studies	\$0.3	HRWC	Infrastructure/Capacity	Complete
1.06c	Planning Funding: Roanoke-Chowan Community College Universal Technical and Training Center	\$0.3	HRWC	Infrastructure/Capacity	Complete
1.06d	Planning Funding: Martin Community College	\$0.1	HRWC	Infrastructure/Capacity	Complete
1.07	Social Media & Targeted Marketing Campaign	\$3	HRWC	Promotion/Marketing	In Execution
1.08	Incentives for Transitioning Military and Spouses	\$3	HRWC	Targeted Populations	In Execution
1.09	Expansion of the GO TEC Career Connections Program	\$2	HRWC	Student/ Parent Outreach	In Execution
1.10	Grow K-12 Outreach Programs	\$2	HRWC	Student/ Parent Outreach	In Execution
1.11	New Horizons Increased Welding Capacity - Preliminary Assessment	\$0.1	HRWC	Infrastructure/Capacity	Complete
		\$29.0			

FY24 MIB Projects

No.	Project	Cost (MM)	Funding Recipient	Category	Project Status
2.01	Trainee Achievement-Based Incentives to Reduce Barriers to Access	\$3	HRWC	Targeted Populations	In Execution
2.02	Instructors for Community College Workforce Cooperative	\$2	CCWC	Infrastructure/ Capacity	In Execution
2.05	McKinsey to Accelerate HRWC Implementation of RWTS Model	\$1	HRWC	Maritime WF Training Sys.	Complete
2.07	Tidewater Community College Skilled Trades Academy	\$3.5	TCC	Infrastructure/ Capacity	Contract Pending
2.08	Virginia Beach Renaissance Academy Lab	\$2.5	VBCPS	Infrastructure/ Capacity	In Execution
2.09	Rappahannock Community College Maritime Trades Program	\$2.5	RCC	Infrastructure/ Capacity	Contract Pending
2.12	HRWC Maritime RMTS Program Expansion	\$1	HRWC	Maritime WF Training Sys.	In Execution
2.13	Schools Harnessing Industry 4.0/5.0 Innovative Practices & Systems (SHIIPS)	\$1.5	VDMC	Student/ Parent Outreach	In Execution
2.15	Improving Government Oversight Activity for Workforce Development and Processes (SUPSHIP)	\$2	VDMC	Gov't Workforce Training	In Execution
		\$19			

FY25 MIB Projects

No.	Project	Cost	Funding Recipient	Category	Approval Status	Contract Status
3.01	Recruitment and Attraction Expansion	\$3,000,000	HRWC	Outreach / Recruitment	Approved	Contract Pending
3.02	RMTS/HRWC Expansion and Supports/Services	\$1,500,000	HRWC	Maritime WF Training Sys.	Approved	Contract Pending
3.04	New Horizons Capacity Expansion	\$2,700,000	NHREC	Infrastructure/ Capacity	Approved	Contract Pending
3.05	Isle of Wight County Schools Capacity Expansion	\$2,000,000	IOWCS	Infrastructure/ Capacity	Approved	Contract Pending
3.06	College of the Albemarle Capacity Expansion	\$540,000	COA	Infrastructure/ Capacity	Approved	Contract Pending
3.07	Virginia Peninsula Community College	\$1,446,500	VPCC	Infrastructure/ Capacity	Approved	Contract Pending
3.08	Paul D. Camp Community College	\$1,565,000	PDCCC	Infrastructure/ Capacity	Approved	Contract Pending
3.09	Q.E.D. Systems, Inc.	\$1,985,000	QED	Infrastructure/ Capacity	Approved	Contract Pending
3.10	Funding for Maritime Training Delivery	\$4,000,000	HRWC	Workforce Training	Approved	Contract Pending
3.11	NNS Training Support for Regional Providers	\$3,000,000	NNS	Infrastructure/ Capacity	Approved	Contract Pending
3.12	Expand K-12 Maritime Immersion & Exploration Programs	\$2,000,000	HRWC	Student/ Parent Outreach	Approved	Contract Pending
3.13	Roanoke-Chowan Community College	\$520,000	R-CCC	Infrastructure/ Capacity	Approved	Contract Pending
3.14	Hampton Roads Maritime Training Academy	\$3,206,158	HRMTA	Infrastructure/ Capacity	Approved	Contract Pending
Subtotal		\$27,462,658				

Data Is Critical

Current Throughput

2024

	Welding	Coatings	Electrical	Inside Machinist	Pipefitting	Outside Machinist	Shipfitting	TOTAL
Enrollments	2619	217	866	30	60	312	158	4262
Completions	2360	205	828	27	57	302	149	3928
Percentage	90%	94%	96%	90%	95%	97%	94%	94%

January through June 2025

		Welding	(Marine) Electrical	Inside Machinist	Outside Machinist	Pipefitting	Shipfitting	Coatings	NDT	Sheet Metal	TOTAL
TOTAL	Enrollments	1580	516	75	56	95	4	31	0	32	2389
	Completions	1190	428	57	51	86	4	31	0	29	1876



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Training Capacity Data as of September 2025

- MIB investments to date critical in closing training capacity gap.
- Future investments must prioritize specific trades with remaining gaps.

Regional Demand for Trained Workers

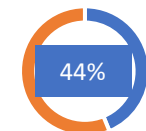
2025	2026	2027
5,017	4,998	5,879



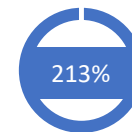
Welding



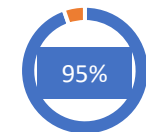
Shipfitting



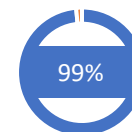
Marine Electrical



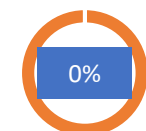
Coatings



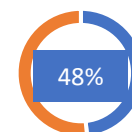
Inside Machinist



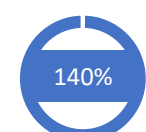
NDT



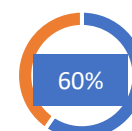
Outside Machinist



Sheet Metal



Pipefitting



■ Training Capacity
■ Unmet Demand
 % of Demand Met

Generating Resources Never Ends

HRMTS Investments Garnered by HRWC

\$663k - GO Virginia – HRWC Maritime Talent Team

\$11M - Good Jobs Challenge Grant / US Department of Commerce

\$6.5M - Hampton Roads Strong / Commonwealth of Virginia

\$2.5M - Norfolk Strong / City of Norfolk

\$850k - Department of Labor / Congressman Bobby Scott Earmark

\$714K – Woman in Skilled Careers Grant / US Department of Labor

\$500K+ - Private Contributions / Dominion Energy, QED, Port of Virginia, others

\$5M – Infrastructure Grant / US Department of Labor

\$70M+ - Maritime Industrial Base / US Department of Defense

TOTAL TO DATE – over \$100M



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2026 Priorities

To continue the leadership of HRMTS and meet the regional hiring and training demand, we prioritize the following strategies



Position HRMTS for Long-Term Success

Compelling Vision & Goals

Stronger Oversight

Appropriate Staffing & Management

Long Term Funding Strategy

ROI Capture



Draw Attention to Industry & Career Opportunities

Implement Regional Branding Strategy

Streamline & Scale Up K-12 Outreach

Scale Up Veteran Targeting

Attract & Retain Talent

Target Messages to Right Audiences



Removing Barriers to Training

Tuition Support

Training Incentives

Supportive Services

Incumbent Worker Training Support



Training Infrastructure

Capacity Building

Instructor Investments

Standardize Training & Curricula

Training Technology Investments



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Many Thanks

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ONE REGION. ONE WORKFORCE. ONE ECONOMY.