

AMERICA'S WELDING WORKFORCE CRISIS

**The Critical Need for an
Accelerated Focused Welding Skills Training Program**

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THE NATIONAL CRISIS

The United States is facing an unprecedented national crisis in welding capacity that will cripple its entire manufacturing sector. Welding is the core of nearly all manufacturing, particularly in the defense industry, representing over 50% of all goods produced nationally.

Current Workforce Status

- The nation's manufacturing backbone is supported by approximately **454,500 welders** currently in the U.S.
- Recent projections by DOL, AWS, Red-D-Arc and multiple industry organizations listed here all indicate a **massive loss of over HALF of this welding workforce** in the next two to three years
- Shortages are already plaguing the industry nationwide in both commercial and military production
- More importantly, several massive new national initiatives will create the largest shortfall in welding capacity since WWII

Key Challenges

- Our nation's welding labor force is heavily populated with older workers
- For over 2 decades, the younger population has sought higher education with very few seeking careers in welding
- This **aging workforce**, predominantly from the baby boomer generation, is reaching its apex in retirement age much faster than they can be replaced, creating a massive void in the industry's needs
- This void will be particularly severe in states with large military contracts and infrastructure supply chain manufacturing
- National welding capacity will be **halved** when it should be **doubled** to meet immediate production needs

Outlook and Requirements

- A projected national welding shortage will require **over 300,000 new welders** just to backfill the losses due to an aging workforce in the marketplace as shortages will affect all industries.
- As importantly, the nation will need an **additional 200,000 or more welders** to meet the demands from four major new national initiatives listed below
- The competition for welding talent will be intense and hinder any ability to recruit from other sources

THE NATIONAL WELDING LABOR SHORTAGE

FOUR MAJOR NEW INITIATIVES: THE CRISIS IS DEEPENING

The following industries will be facing the need for an ever increasing number of welders over and above the attrition caused by accelerating retirement losses, creating a perfect storm that will cause an even more acute shortage of welders throughout the country. Losing half of the welding talent through retirement as predicted will have a devastating effect, but the dramatic need for thousands of additional welders at this specific time in history will lead to critical shortages of welders and an inability to meet the nation’s vital production demands. The shortages will manifest themselves in four major national initiatives:

THE BIG 4

INITIATIVE 1: ACCELERATING U.S. NAVY AND MERCHANT SHIPBUILDING

Current Challenges

- The new and accelerating demand in shipbuilding for welders will not only continue to manifest itself in naval surface and sub-surface vessel production, (see below) but the additional need for hundreds of new merchant vessels will further increase the demand for more welders throughout the nation's shipbuilding community
- One of the major impediments to getting ships built on schedule has been **worker shortages** at many of the nation's shipyards. Christopher Kastner, HHI President and CEO, stated that “HII has also had trouble finding skilled workers for its shipbuilding programs, and since 2020 has spent \$450 million in training”
- U.S. Navy announced that [four of its most critical shipbuilding programs are years behind schedule](#). The findings of Navy Secretary Carlos Del Toro’s 45-day shipbuilding study which he ordered in January 2024, show a total of 11 years’ worth of delays across the affected programs.

Key Publications and Long-Term Warning Signals on Shipbuilding Industry Challenges

The following publications detail the unprecedented demand for skilled workers in the shipbuilding industry and outlines the immediate shortage and its impact on critical military programs:

Publication	Description	Key Focus
1. Congressional letter	A Call to Action for Maritime Strategy and Policy	Strategic maritime policy needs
2. Congressional letter	Merchant Marine capacity	Commercial maritime fleet concerns
3. Politico article	Navy cancels ship briefings after damning internal report	Status of Navy shipbuilding challenges

4. Congressional Guidance	A National Maritime Strategy	Strategic maritime planning (See graph on Page 3)
5. Brookings Institute	To expand the Navy isn't enough. We need a bigger commercial fleet.	Commercial fleet expansion needs
6. ProPublica article	Trump Has Promised to Build More Ships. He May Deport the Workers Who Help Make Them.	Workforce challenges in shipbuilding
7. Moneywise	U.S. Shipbuilding Sank As China Became the Dominant Player	Competitive disadvantage in global shipbuilding
8. U.S. Naval Institute News	Constellation Frigate Delivery Delayed 3 Years	Problems such as design maturation, supply chain issues, and difficulty finding skilled workers were cited as factors in the program delays.

DRAMATIC DIFFERENCE BETWEEN THE U.S. AND CHINESE MERCHANT SUPPORT VESSELS

The United States is at an inflection point in international maritime affairs. Our peer competitor, the People's Republic of China (PRC), is expanding its strategic influence over the oceans. It is building a global maritime network, on which the American economy and critical maritime supply chains have become increasingly reliant. Meanwhile, the U.S. has failed to give proper attention to the elements of our national sea power. U.S. maritime infrastructure is aging, including in our naval and commercial shipyards, which once produced the world's finest ships. **How bad is it:** the dramatic difference is highlighted in the following chart:



Strategic Implications

- Located between two of the world's largest oceans, America is—and will always be—a maritime nation
- After years of neglect, changing the trajectory of our shipbuilding and shipping industries is a task that will be measured in **decades, not days, months, or years**
- We stand at an inflection point: we are laying up active naval ships now because of lack of adequate support vessels
- We must act now—before it is too late—to reinvigorate American and allied maritime power on the seas
- Our national commercial fleet cannot support any naval defense initiatives for any meaningful long term deployment. We simply do not have the commercial shipping capacity to provide fuel, food, ammunition and general supplies to a worldwide naval fleet with less than 200 aging merchant marine vessels.

Conclusion

There is **not one** shipyard or manufacturing supply chain that is not short of welders today. If we cannot find welding talent today to meet our present needs, where will the welders come from when we need to build **500 new ships** now being funded? The stress of this crisis will be devastating for companies reliant on a welding workforce. We must implement a new plan to accelerate deployment of thousands of new welders directly focused on key strategic industries. We cannot continue to do the same old programs.

INITIATIVE 2: NATIONAL INFRASTRUCTURE

Recent Developments & Funding

- More than **\$480 billion** in Bipartisan Infrastructure Law funding has been announced for over **60,000 specific projects** in all 50 states, D.C., and U.S. territories. (See chart below from the U.S. Department of Transportation.)
- Many projects, such as the recently awarded [\\$5 billion Large Bridge Project Award](#) affecting 13 major bridges in 16 states already awarded in 2024 will immediately stress an already shrinking workforce. Bridge repair alone and replacement will call for **several thousand welders** when fully in place.

Bipartisan Infrastructure Law and its Impact on America's Infrastructure

As of September 2024, more than \$480 billion in Bipartisan Infrastructure Law funding has been announced for over 60,000 specific projects and awards in all 50 states, D.C., and U.S. territories.



60,000+ construction projects are moving forward with funding from the infrastructure law.



Projects to build more than **4,600** buses in American factories nationwide have been announced.



175,000+ miles of roadway are being repaired or improved from coast to coast – enough to cross the U.S. 60 times.



1,100+ airports are modernizing their terminals, expanding operations, or improving their runway infrastructure.



10,200+ projects to build, repair, or modernize America's bridges are in progress.



1,400+ communities in all 50 states have been funded to improve roadway safety for drivers, cyclists, and pedestrians.



500+ transportation projects have been funded across more than 160 Tribal Nations.



Nearly **170** rail projects nationwide have been announced, including those that will modernize and expand America's rail network, deliver the first high-speed rail systems in the country, replace aging infrastructure on America's busiest rail corridor in the Northeast, make freight rail safer, and eliminate or improve 400+ highway-rail crossings.



500+ port and waterway projects have been announced by either U.S. DOT or the Army Corps of Engineers to strengthen supply chain reliability, speed up the movement of goods, reduce the costs of everyday items, and lower carbon emissions.



Over **\$11 billion** in discretionary grant funding from key programs – more than twice the amount than the previous 4 years combined – has been announced to rebuild and modernize rural roads, bridges, transit, ports, and airports.



Nearly **11,200** public transit projects have been announced to expand, improve, or modernize operations.



U.S. Department of Transportation

Updated September 2024

INITIATIVE 3: DOUBLING GRID SIZE

Industry Impact & Workforce Needs

- The need for welders in infrastructure is increasing dramatically, particularly in the lighting and pole industry
- Billions have already been allocated for repairing and building transmission infrastructure
- **Millions of new steel poles** need to be produced
- Major companies like Trinity, Sabre, and Valmont are already short **thousands of welders**
- Most plants have **300 to 400 welders**, and as capacity demands increase, they will absorb a large portion of any welding workforce capacity

Key Findings & Projections

- The DOE's National Transmission Needs Study (October 30, 2023) estimates that by 2035 the U.S. must **more than double existing regional transmission capacity by more than fivefold**
- Secretary of Energy Jennifer Granholm stated (July 22, 2024): "By 2030, we expect to add the equivalent of over **300 Hoover Dams-worth of clean energy** to our grid"

- According to the U.S. Department of Energy, the country will need **47,300 gigawatt-miles** of new power lines by 2035, amounting to a **57% expansion** of the existing grid

Supporting documents:

- [DOE's National Transmission Needs Study, released October 30, 2023](#)
- By 2035 the U.S. must more than double existing regional transmission capacity by more than fivefold, see key [findings](#) of the National Transmission Needs Study
- ["The U.S. Needs to Double the Size of its Grid"](#)

INITIATIVE 4: OIL FIELDS WELDING DEMAND WILL RESURFACE

Expected Developments

- With the change in administration, our country's energy policy will be dramatically different
- If “drill baby drill” happens, many thousands of the best welding talent will be needed in the oil fields, as we begin to drill and build new pipelines
- If the past is any guide, these jobs will pay **nearly triple existing salary levels** now in industry and will further drain welding talent

SIX-WEEK RAPID SKILLS WELDING TRAINING MODEL

An Innovative Solution to America's Critical Welding Worker Shortage

We have little ability in this nation today to produce welding talent in sufficient numbers and quickly enough to meet the tsunami that will pirate welders from existing employment to the highest-paying companies. The demand for welders will be acute everywhere, and our national training capacity will not be able to offset the severe demand placed on the welding workforce.

The Rapid Skills Welding Training model was developed specifically to combat this national welding shortage while providing an immediate efficient and beneficial pathway for military personnel transitioning to civilian careers at a substantial savings to the taxpayer.

PROVEN CONCEPT AND VALIDATION

The Six-Week Rapid Skills Welding Training model is built on a solid foundation of proven concepts. A precursor initiative—originally launched for civilians through the U.S. Department of Labor—successfully trained over 1,400 welders and machinists across multiple states. It was later modified and approved to its current welding program and tested at several manufacturers in Texas with great success. Classes were all under 45 days or less. All graduates of the program qualified for entry level welder employment, confirming the model's effectiveness in producing certified

welders in record time customized for industry requirements. See link [here](#) to photos of original M.O.S.T. graduates from multiple states.

The Rapid Skills Welding Training model, recommended by M.O.S.T., Inc., a national logistics provider that specializes in comprehensive turnkey training sites serving colleges and training organizations, represents a revolutionary approach to address the dual challenges of a national welding shortage and the difficulties faced by transitioning military personnel. The accelerated training is the only model that can recruit and train onsite nationally and deploy welders throughout the U.S.

Armed with the ability to rapidly train and place welders without geographic boundaries and to customize the training to fit the employer's needs, the Rapid Skills Welding Training model is ideally suited to help fill the all-important welding gap deficit facing our nation's defense industry and the widening gap in our national manufacturing base. Finding a workforce large enough and available year after year to fill the welding workforce needs of our nation, the six-week program has the ability to rapidly train onsite at any military facility to help rebuild America's welding workforce.

The Rapid Skills Welding Training model can train onsite at any military facility and make available AWS-certified welders with specific customized skills to directly match employer needs. Soldiers transitioning to civilian life represent a large, highly-talented motivated workforce that is available year after year. The training model has been specifically designed to streamline and accelerate "speed to market" for the talent of the transitioning veterans. Traditional training models are unable to produce focused welding talent with customized training for specific industries over a wide geographic area, as the six-week program has successfully achieved.

Overview

This comprehensive six-week welding training model arranges employment for veterans in advance while providing them with national welding certification training onsite from the American Welding Society (AWS), effectively bridging the gap between military service and civilian career success.

A HIDDEN READY WORKFORCE—TRANSITIONING SOLDIERS

The Rapid Skills Welding Training model was designed specifically to be able to capitalize on the finest hidden workforce in the nation. The program can train onsite at any military facility in the country and provide employment day one after discharge with a well-paid full-time technical job with a robust career ladder. The curriculum is customized to employer-specific needs and removes the majority of all negative aspects facing transitioning soldiers and their families.

Demographic Profile

- Over **200,000 soldiers** transition to civilian life annually, over **64,000 in the army alone**
- Statistically, the majority of these transitioning soldiers have been in the military for **less than 4 years**

- **80%** are under 25 years; **40%** are married and have little or no skill sets or technical training readily transferrable to civilian jobs

Transition Challenges

- The Rapid Skills Welding Training model is ideal for transitioning soldiers, who represent a unique and promising workforce capable of addressing this critical shortage
- They are mostly high school graduates or equivalent, some with a year or so of higher education; majority are mustered out from infantry, armored or quartermaster departments
- These groups are considered the "high risk" group because they do not bring easily marketable skill sets to the civilian world
- This core group has experienced the highest transitional health and social risk for themselves and their families; All are looking for a career path
- Military veterans frequently face significant barriers in their transition to civilian careers; according to Pew Research, approximately **27% of veterans** report difficulties transitioning into civilian life; this figure increases to **44% among post-9/11 veterans** (Pew Research Center, 2011). See full [Report on Transitioning Soldiers, U.S. Army Soldier for Life](#) pages 1-10.

OVERCOMING THE CHALLENGES

Soldiers and Families At Risk Now More Than Ever

Key Risk Factors

- Service members who leave the military when the labor market is weak—as it was in 2020—or during recessions experience **sizable and long-term negative effects on earnings** (Bureau of Labor Statistics, 2021)
- Soldiers are at the **highest risk** for numerous social and emotional challenges during the first year of discharge when employment and career goals are unknown
- Knowledge that you have a high-quality well-paying job with full benefits day one after discharge coupled with a robust career ladder is key to helping soldiers and their families make a successful transition into civilian life

Transitional Training Challenges

- Many transitioning soldiers are never hired for their selected fields of training after years of sacrifice with the traditional models
- During this transitioning period, most families struggle to earn meaningful income and to maintain a proper standard of living
- After struggling for many months or years of training, many positions fail to materialize as expected
- This result has been difficult and devastating for the discharged soldiers

- These individuals are designated "at risk" and form the largest numbers affected by depression, divorce, alcohol, abuse, drug use, crime, and suicides
- Traditional programs take much longer, cost more, do not guarantee employment, do not train welders for specific customized employer work for immediate production and are geographically restricted when placement needs are national in scope

Critical Finding: When transitioning, the time period between discharge and meaningful work is the **real enemy** of transitioning soldiers and their families. There are literally dozens of high-level studies that validate this fact.

Research-Backed Evidence

The Rapid Skills Welding Training model has removed the single biggest negative factor in the transition process by providing immediate employment upon discharge.

From JAMA Psychiatry (June 2015, Volume 72, Number 6, p.567):

- "Compared with those with 4 or more years of military service, individuals with less than 4 years of service had an increased rate of suicide. (80% of discharges at Texas bases are under 4 years)"
- "There are several possible explanations for these findings. It is possible that the transition from the military to civilian life may have increased risk for suicide. Loss of a shared military identity, difficulty developing a new social support system, or unexpected difficulties finding meaningful work may contribute to a sense that the individuals do not belong or are a burden on others."

From VA Report:

- "Most suicide attempts by those who are or will become veterans occur following separation from military service"
- "Veterans are most vulnerable in the first three months following separation from military service"

See the VA report: [Help With Readjustment and Social Support Needed for Veterans Transitioning from Military Service](#)

Current Crisis Status:

- The Veterans Crisis Line is fielding a record number of calls for help, VA stats show
- The suicide hotline received more than **88,000 calls, texts, and chats** in March 2023
- This is the highest amount of monthly contacts, which has risen dramatically
- Military suicides continue to increase

OVERVIEW AND PROCESS

Six-Week Rapid Skills Welding Training

The Rapid Skills Welding Training model provides an intensive combination of theory and hands-on practical welding instruction. Beginning with a state-of-the-art virtual welder for initial screening, the training progresses to live welding machines in OSHA-approved labs located on or near military bases. The curriculum is customized to match the specific needs of hiring companies, ensuring that graduates can contribute productively from day one. (See curriculum and 30-month OJT e-learning criteria in addendum.)

Implementation and Company Commitment

The program's process is structured in a series of well-defined steps to guarantee a seamless transition for each participant:



How the Program Works

Step	Process Phase	Description
1	Recruitment	Initial outreach to transitioning soldiers
2	Initial Screening and Testing	Assessment of aptitude and interest
3	Video Interview with Company	Direct connection with potential employer
4	Company Commitment	Formal agreement for post-graduation employment
5	Starting Dates Agreed Upon	Coordinated scheduling for training program
6	Six-Week Training Completion / AWS Welding Certification	Intensive training culminating in industry certification
7	Graduation from Program	Formal completion of training requirements
8	Begin Full-Time Employment	Immediate transition to civilian workforce
9	Company On-the-Job Training (OJT)	Continued skills development in workplace setting
10	Initiation of Company 30-Month E-Learning	Long-term professional development program

Each step is designed to minimize downtime and ensure that soldiers begin earning a competitive salary and benefits immediately upon discharge.

Program Details

Rapid Skills Welding Training, which has been redesigned specifically for veterans, provides a welding job as a full-time welder to all graduates of the six-week program immediately upon discharge. It is a highly specialized, rapid skills training course that is customized to meet the needs of the participating companies who are hiring.

Training Methodology

- The course is a rigorous combination of theory and a variety of hands-on practical welding activities
- A state-of-the-art virtual welder is used for initial screening
- As students progress, they transition to live welding machines
- All equipment is provided onsite on or near military bases with large live OSHA-approved welding labs
- All of the knowledge and skills needed for a complete novice to ultimately earn an American Welding Society (AWS) certification is provided in this program

Company-Specific Customization

The training has been customized so that welding machines, rod characteristics, plate sizes, material components, temperatures and feed rates match to the degree possible to the needs of the participating companies, allowing the student to become productive immediately upon hire.

Program Benefits

- This program will not be offered to any student without a company's prior commitment for employment as a full-time welder upon successful completion of the program
- All-in cost to taxpayer per student is approximately **20%** of traditional 18-month welding programs to reach employment
- The soldier receives full-time employment as a welder plus full benefits and a robust career path with company accelerated on-the-job training (OJT)
- Immediate placement eliminates need for any unemployment and long dependency on multiple social programs that have proved so devastating to the high-risk group of soldiers and their families
- The return on investment (ROI) at today's wages will provide income tax revenue to the treasury and U.S. taxpayer that covers 100% of the program cost within 12 to 18 months of employment

WHY THE RAPID SKILLS WELDING TRAINING MODEL WORKS

The accelerated training model offers a commitment of employment **before** training begins, features a compressed six-week curriculum, and ensures that training is delivered at or near the soldiers' base. These elements not only lead to immediate productivity for employers but also provide a secure transition for service members.

COMPARATIVE ANALYSIS: TRADITIONAL MODELS VS. RAPID SKILLS WELDING TRAINING

The dramatic differences between traditional training models and the Rapid Skills Welding Training model are detailed below:

Traditional Model — The Major Flaws Are:

- **After discharge there are no assurances your training will result in a job** > from months to years without knowing > high anxiety
- **Long periods without meaningful income** > financial burden, loans, credit issues, family stress
- **Many families are forced on welfare during this time** > depression, self-worth
- **When training programs do not lead to a job** > sense of failure, social breakdown
- **Multiple relocations required for various training sites** > family stress
- **Opportunity for income and benefits loss during training is substantial** > No real income during training > additional pressure
- **The "high risk" individuals, typically younger who joined from high school and mustered out early without any transferrable skill sets** > drug and alcohol abuse, crime and mental issues are prevalent
- **Welding training in traditional programs is general in nature, forcing hiring companies to spend long lead times to train to the actual job needs** > simply refuse to hire if not prepared to produce their goods day one
- **During a traditional 18-month program, the trainee receives no actual industry work experience**

The Rapid Skills Welding Training Model:

The accelerated six-week training model removes every single negative factor listed above for any soldier wanting a career in welding when transitioning to civilian life.

- **Every single graduate receives a commitment for employment before training begins**
- **The entire rapid skills program is only six weeks long**
- **Soldiers can begin earning full-time salary and benefits day one after discharge**
- **The entire training is completed while the soldier is still in the military**
- **Full military pay and benefits are ongoing during training**
- **The training comes to the soldier on or near their base, home every night**
- **Can select manufacturing site and benefits from participating employers in advance**
- **All receive National Certification from the American Welding Society**

- Will have career ladder choices in a stable demand driven industry
- Every soldier is trained for the exact job he/she will perform at the manufacturer
- Customized courses use the same machines, rods, equipment and work which allows productive work on day one
- Substantial additional income, work experience and benefits begin immediately
- In 18 months soldiers will earn over \$150,000 in total real income and some will earn much more as unlimited overtime is available
- In 18 months the soldier will have over 3,000 hours of extremely valuable heavy industry welding experience

ECONOMIC IMPACT AND RETURN ON INVESTMENT

The economic benefits of the Rapid Skills Welding Training model extend beyond individual participants to both government and industry. With a cost of approximately 20% of traditional 18-month training programs, the program:

- **Reduces Unemployment Costs:** Immediate job placement eliminates lengthy periods of unemployment, which have cost the DOD millions in UCX payments. In analyzing the cost of an E5 with family in a standard 18-month traditional cost with total taxpayer cost for all social programs, tuition, etc., the total cost approaches \$80,000 to \$100,000 before possible employment. The Rapid Skills Welding Training model cost all-in is around 20%, and most importantly, because of immediate employment, total program cost is recovered back to the treasury within 12 to 18 months through income tax revenue
- **Accelerates Income Generation:** Soldiers earn over \$100,000 (plus potential overtime) within 18 months while accruing 3,000+ hours of valuable heavy industry experience
- **Enhances Tax Revenues:** The rapid return to the workforce ensures a quicker return on taxpayer investment through regular income taxes
- **Provides the U.S. Economy with Vital Talent** critically needed for the nation's economic well-being, further boosting economic value of the Rapid Skills Welding Training program

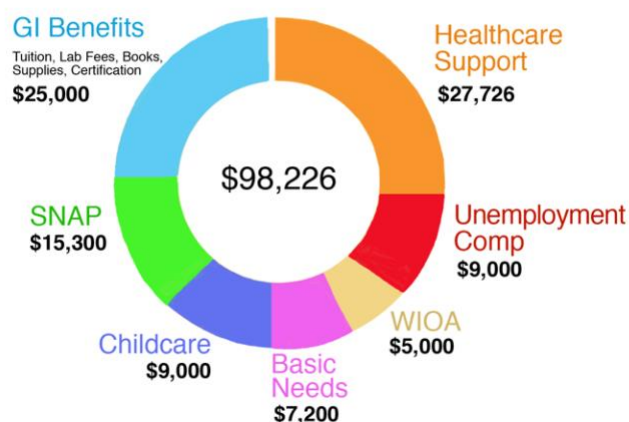
This cost-efficient model demonstrates a robust economic return and strengthens national manufacturing competitiveness.

Financial Benefits Comparison

- After 18 months of employment, the soldier will have earned over **\$100,000** from salary and typically much higher with overtime pay (averages \$15-30K per year)
- Additional OJT payments (for example Houston) would amount to an additional **\$28,030 tax-free** over 18 months
- This does not calculate additional salary increases that are standard for manufacturing companies or contribution to matching retirement funding
- Also in 18 months the soldier will have accumulated over **3,000 hours** of heavy industry welding experience compared to no experience, no salary or benefit compensation during traditional training models

- Most importantly, the soldier has a job and location in advance of training while in traditional models, there is no guarantee of any employment or knowledge where the job is located
- The total all-in cost from soldier to civilian welder is \$20,000 which is approximately **20% of the traditional all-in cost of 18-month programs** with no job guarantees. The cost is inclusive of all specialized safety clothing and equipment, all training manuals, onsite recruitment and training on active bases nationally, the locating of manufacturing companies with up-front welding job commitments and matching the customized 6-week training to employer need. Includes all certification and testing costs from the American Welding Society personnel and providing 30 months of e-learning modules for rapid career advancement after employment. Because of up-front job commitments, the Rapid Skills Welding Training program costs are recovered through standard income tax, while traditional programs have no work guarantees at the end of training.
- This is accomplished by eliminating multiple social program costs for 18 months, and immediate employment allows full return of program costs to the taxpayer through normal income taxes in less than 18 months

Cost of Traditional 18-Month Welding Training Program



Note: The latest data for Army personnel shows that soldiers transitioning from the military are not moving directly into jobs but forced to utilize UCX unemployment compensation as they search for jobs and educational training to obtain meaningful work. The DOD has paid millions in unemployment UCX payments. The Rapid Skills Welding Training program, by providing training before discharge and immediate employment, saves paying these costs and provides immediate return to the taxpayer in income taxes and economic growth through production of goods that contributes to the overall economy. The program cost is a fraction of unemployment cost and income taxes provide a 100% positive ROI before a traditional 18-month program is completed. (Please see [Report on Transitioning Soldiers. U.S. Army Soldier For Life](#) UCX data Pages 14, 15, 16).

Head Start and Long-Term Benefits

When soldiers know they have a committed job with wages and full benefits well above national averages at a location they have pre-selected, it is the major positive step in transitioning to civilian life. Eliminating any long periods of financial stress or loss of wages for months or years gives the soldier and their families a real financial and emotional boost and a head start on a prosperous journey into civilian life. This program is an ideal answer particularly for "at-

risk" soldiers who have not developed easily transferrable skill sets. A program that in six weeks takes an individual from no skill / no hope to a certified welder with a job with full benefits and a robust career ladder (see [30-month training curriculum](#)) is not only attractive but life-changing.

With company commitments for employment upon graduation, accelerated training, rapid certification, and reducing overall training costs, this program not only meets critical national initiatives but also supports the financial and emotional well-being of our service members and their families. The evidence presented supports further endorsement and potential expansion of this model to secure our nation's manufacturing future and strengthen our national defense capabilities.

CONCLUSION

The Rapid Skills Welding Training model represents a revolutionary approach to addressing the dual challenges of a national welding shortage and the difficulties faced by transitioning military personnel. Armed with the ability to rapidly train and place welders without geographic boundaries and to customize the training to fit the employer's needs, this program is ideally suited to help fill the all-important welding gap deficit facing our nation's defense industry and the widening gap in our national manufacturing base.

SUPPORTING DATA AND REFERENCES

Section 1 -- Warning Bells

Key Research & Documentation

- ["The U.S. Needs to Double the Size of its Grid"](#)
- [\\$5 billion Large Bridge Project Award](#)
- [To expand the Navy isn't enough. We need a bigger commercial fleet.](#)
- Congressional letter: [A Call to Action](#) for Maritime Strategy and Policy.
- Congressional letter asking for action for [Merchant Marine capacity](#).
- Politico article showing status of Navy shipbuilding challenges: [Navy cancels ship briefings after damning internal report](#)
- [Congressional Guidance for a National Maritime Strategy](#) Please see graph on Page 3.
- Brookings Institute: [To expand the Navy isn't enough. We need a bigger commercial fleet.](#)
- ProPublica article: [Trump Has Promised to Build More Ships. He May Deport the Workers Who Help Make Them.](#)
- [US Shipbuilding Sank As China Became the Dominant Player](#) — Now Trump Wants To 'Resurrect' the Industry
- [U.S. Office Focused on Shipbuilding Aims to Counter China's Maritime Dominance.](#) An office of U.S. shipbuilding to facilitate America's return to being a true maritime power is long overdue

Section 2 -- Program Highlights and Information

Training Resources & Documentation

- Graduates Class Photos from various states: [Link to M.O.S.T. Graduates Photos](#)
- [TEEX/M.O.S.T. Welding Program Video](#)
- Six-Week [Curriculum/Syllabus](#)
- Photos of [M.O.S.T. Welding Training Labs](#)
- TEEX/M.O.S.T. [30-Month On-the-Job Training \(OJT\) Welding Training Course Curriculum](#)

Research on Transitioning Soldiers

- VA report from Science to Practice Using Research to Promote Safety and Prevent Suicide, [Help With Readjustment and Social Support Needed for Veterans Transitioning from Military Service](#).
- Review and analysis of the state of transitioning soldiers from U.S. Army: [Report on Transitioning Soldiers. U.S. Army Soldier for Life](#). (Please see pages 1-10)

Industry Data & Statistics

- CostHelper. (2019). Cost of Welding Training. Retrieved from <https://education.costhelper.com/welding-school.html>
- Deloitte & Manufacturing Institute. (2021). [Creating Pathways for Tomorrow's Workforce Today](#).
- Pew Research Center. (2011). The Difficult Transition from Military to Civilian Life. Retrieved from <https://www.pewresearch.org>
- U.S. Government Accountability Office (GAO). (2025). [Shipbuilding and Repair: Navy Needs a Strategic Approach for Private Sector Industrial Base Investments](#). GAO-25-106286.