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Analysis of Alternative Mixes of Full-Time Support in the Reserve Components

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Executive Summary

The National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2017 requests a report on the “feasibility and advisability of converting any remaining military technicians (dual status) to personnel performing Active Guard and Reserve duty under 32 U.S.C. § 328, or other applicable provisions of law.” The language requests from the Office of the Secretary of Defense (OSD) an “analysis of the fully-burdened costs of the conversion” and “an assessment of the ratio of members of the Armed Forces performing Active Guard and Reserve duty and civilian employees of the Department of Defense under title 5, United States Code, required to best contribute to the readiness of the National Guard and the Reserves.”¹

The objective of the report is to analyze the cost and other implications of various mixes of full-time support (FTS), including Active Guard and Reserve (AGR) and military technicians (dual-status) (MTs), with a focus on cost, management, and readiness. Law, primarily under title 10 and title 32, and Department of Defense (DoD) FTS policy, requires that the Reserve Components should “maintain a cadre of FTS personnel who are primarily responsible for assisting in the organization, administration, recruitment, instruction, training, maintenance, and supply support to the Reserve Components.” FTS categories are:

- Active Guard and Reserve (AGR)
- Military Technician (Dual-status) (MT)
- Active Component (AC)
- Civilian Federal Employee (CIV)

Each relevant Reserve Component (RC) is analyzed as an independent population, one of four individual cases: US Army Reserve (USAR), Army National Guard (ARNG), US Air Force Reserve (USAFR), and Air National Guard (ANG). The two tables below display the current FTS workforce, minus AC FTS who continue in-place following any other changes, against one of two workforce alternatives: in the first table, alternatives derived from the FY 2017 NDAA to convert all remaining MTs to a mix of 80 percent AGRs and 20 percent civilians; in the second table, RC-preferred alternatives proposed by

¹ Pub. L. No. 114-328, National Defense Authorization Act for Fiscal Year 2017, Sec. 1084(C), “Report on Conversion of Military Technician Positions to Personnel Performing Active Guard and Reserve Duty,” December 23, 2016.

RC subject matter experts (SMEs) associated with the project working group. The working group was assembled by the office of the Assistant Secretary of Defense (Manpower and Reserve Affairs) to allow RC SMEs to directly collaborate with the team.

Current and FY 2017 NDAA-Required FTS Analysis Populations

FTS	USAR		ARNG		USAFR		ANG	
	Current	NDAAs	Current	NDAAs	Current	NDAAs	Current	NDAAs
AGR	16,261	22,317	30,155	50,561	2,955	11,004	14,764	32,446
MT	7,570	0	25,507	0	10,061	0	22,103	0
NDST	420	0	1,600	0	90	0	350	0
CIV	3,083	5,017	1,021	7,722	3,768	5,780	1,313	6,084
Total	27,334	27,334	58,283	58,283	16,874	16,784	38,530	38,530

Note: NDST - Non-Dual-Status Technician.

Current and RC-Preferred FTS Analysis Populations

FTS	USAR		ARNG		USAFR		ANG	
	Current	Preferred	Current	Preferred	Current	Preferred	Current	Preferred
AGR	16,261	16,261	30,155	39,802	2,955	3,588	14,764	25,045
MT	7,570	7,512	25,507	16,330	10,061	9,112	22,103	8,862
NDST	420	0	1,600	0	90	0	350	0
CIV	3,083	3,561	1,021	2,151	3,768	4,084	1,313	4,623
Total	27,334	27,334	58,283	58,283	16,874	16,784	38,530	38,530

Note: NDST - Non-Dual-Status Technician.

These workforce alternatives guide estimates of both the DoD program cost and fully-burdened cost. From data provided by DoD and other federal government sources, the unique demographic characteristics of each alternative population (rank, grade, seniority, location, etc.), influenced by the unique administrative and management practices of each RC, support a range of outcomes.

Management

Primarily through the working group, it became apparent the RCs administer FTS differently, reflected in the demographics reported in Section 2.B. Adapted, rather than common, approaches to workforce mix are thus likely to lead to a more effective workforce. Under a rapid conversion, administrative resources and management systems would likely be highly burdened, facing uncertainty regarding many factors, such as attrition and recruitment rates. However, our research indicated that there are unlikely to be consequential management effects associated with a shift from MT to AGR if the Components are provided appropriate flexibility and the shift occurs over a preferred

extended timeline of 10–15 years. For any conversion timeframe, statutory and policy changes identified in the research would likely ease elements of expected conversion-related turbulence.

Readiness

There are no readily quantifiable unit or personnel readiness effects that would prevent a conversion of MTs to AGRs over an extended timeframe. Both AGRs and MTs have unique policy advantages, but the relative readiness benefit of such advantages is not clearly apparent. Advantages of the MT program in position stability and career longevity are supported by some data; however, not all RCs display these benefits consistently, and the quality of the supporting data is low. Additional research would be necessary to determine any verifiable readiness effects.

Cost

Our report provides for each case two types of cost estimate: the average annual individual cost of each type of FTS, and the average annual cost of alternative FTS workforce mixes. Each type of cost estimate includes DoD program and fully-burdened costs, and assumes consistent demographic profiles. Estimates assume 100 percent of authorizations are filled, and that filled positions are fully resourced. It is reasonable to assume the reported point estimates are high relative to actual requirements.

FTS individual cost estimates indicate relatively higher costs for all RCs when AGRs replace MTs on a 1:1 basis. The magnitude varies by RC, with Army Components showing larger cost differences than Air Force Components. The two tables below display estimates of average annual DoD program costs and fully-burdened costs for the current FTS workforce against two alternatives: an FY 2017 NDAA reporting requirement option to convert all MTs to a mix of 80 percent AGRs and 20 percent civilians, and an RC-preferred FTS mix of AGRs, MTs and civilians.

Current and FY 2017 NDAA-Required FTS Program and Fully-Burdened Cost Estimates

Cost (\$M)	USAR		ARNG		USAFR		ANG	
	Current	NDAA	Current	NDAA	Current	NDAA	Current	NDAA
Program	\$3,330	\$3,497	\$7,054	\$7,452	\$2,024	\$2,085	\$4,629	\$4,785
		+5%		+6%		+3%		+3%
Fully-Burdened	\$4,491	\$4,760	\$9,637	\$10,399	\$2,712	\$2,896	\$6,700	\$7,190
		+6%		+8%		+7%		+7%

Note: FY 2017 NDAA requirement alternatives sum to an annualized cost increase of \$782 million for the program and \$1,705 million fully-burdened, and represent a relative cost increase of approximately 5 percent for the program and 7 percent fully-burdened.

Note: Cost estimates are in FY 2017 dollars.

Current and RC Preferred FTS Program and Fully-Burdened Cost Estimates

Cost (\$M)	USAR		ARNG		USAFR		ANG	
	Current	Preferred	Current	Preferred	Current	Preferred	Current	Preferred
Program	\$3,330	\$3,338	\$7,054	\$7,225	\$2,024	\$2,021	\$4,629	\$4,724
		+0%		+2%		-0%		+2%
Fully-Burdened	\$4,491	\$4,513	\$9,637	\$9,968	\$2,712	\$2,717	\$6,700	\$6,995
		+0%		+3%		+0%		+4%

Note: RC-preferred alternatives sum to an annual cost increase of \$272 million for the program and \$654 million fully-burdened and represent a relative cost increase of approximately 2 percent for the program and 3 percent fully-burdened.

Note: Cost estimates are in FY 2017 dollars.

Across all four Components, the **RC-preferred alternatives sum to an annual cost increase of \$272 million for the program and \$654 million fully-burdened**. More substantial alternatives (with respect to the size of a converting population) that shift greater numbers of MTs to either AGR or a mix of AGR and civilian generate, as expected, larger cost increases. Under a full conversion, the **FY 2017 NDAA requirement alternatives sum to an annualized cost increase of \$782 million for the program and \$1,705 million fully-burdened**.

Although the magnitude of cost increases is large under a full conversion of MTs to AGRs, the effect relative to the cost of a fully manned and fully resourced FTS program is small: increases of 3 percent to 5 percent for the program and 6 percent to 8 percent fully-burdened, depending on the Component. Also, actual DoD budget effects are likely to be apparent only for major elements of the DoD program cost. Sensitivities are high for population demographic characteristics such as military rank and civilian grade. By targeting certain subsets of the total MT population, cost could be managed. Given the small relative cost effects, sensitivity to demographic factors, and uncertainty inherent to elements of fully-burdened cost, cost should be considered not alone, but jointly with other factors, in any decision to move forward with a partial or full conversion of MTs.

Additional findings—on such topics as the measurement of personnel cost, variation in demographic and professional characteristics across RCs, the need for improved data reporting and modeling, and others—are discussed in the main body of the paper.

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1. Introduction

The National Defense Authorization Act (NDAA) for Fiscal Year (FY)¹ 2016 requires that, “The Secretary of Defense shall convert not fewer than 20 percent of the positions...from military technician (dual status) positions to positions filled by individuals who...are not military technicians.”² The 2017 NDAA delays implementation of this requirement pending submission of a report on the “feasibility and advisability of converting any remaining military technicians (dual status) to personnel performing Active Guard and Reserve duty under section 328 of title 32, United States Code, or other applicable provisions of law.”³ The language requires from the Office of the Secretary of Defense (OSD) an “analysis of the fully-burdened costs of the conversion” and “an assessment of the ratio of members of the Armed Forces performing Active Guard and Reserve duty and civilian employees of the Department of Defense under title 5, United States Code, required to best contribute to the readiness of the National Guard and the Reserves.”

The objective of the report is to analyze the cost and other implications of various mixes of full-time support (FTS), including Active Guard and Reserve (AGR) and military technicians (dual-status) (MTs), with a focus on factors of cost, management, and readiness. The Assistant Secretary of Defense (Manpower and Reserve Affairs) asked the Institute for Defense Analyses (IDA) to review existing work on the cost of MTs and other kinds of FTS personnel and modify its Active-Reserve cost model to ensure cost estimates of all types of personnel are consistent with Department of Defense (DoD) instructions. To complete this research, IDA would apply its analytic tool to support individual cost estimates and to determine the cost of alternative mixes of FTS personnel. The sponsor also asked IDA to evaluate readiness and management, from a primarily non-quantitative

¹ All references to years are to federal fiscal years (FYs) unless otherwise noted in the proximate text.

² Pub. L. No. 114-92, National Defense Authorization Act for Fiscal Year 2016, Sec. 1053, “Management of Military Technicians,” November 25, 2015.

³ Pub. L. No. 114-328, National Defense Authorization Act for Fiscal Year 2017, Sec. 1084(C), “Report on Conversion of Military Technician Positions to Personnel Performing Active Guard and Reserve Duty,” December 23, 2016. Later portions of the NDAA language define *AGR duty* with the meaning given that term in section 101(d)(6) of title 10, U.S.C. Initial paragraph only deals with title 32, a National Guard status/authority; title 10 expands the analysis to all Reserve Components (RCs).

perspective. IDA’s Active-Reserve cost model contains the major relevant cost elements and has been modified for application to the analysis included in this paper.

DoD policy for managing the FTS program in the Reserve Components (RCs) is described in DoD Instruction (DoDI) 1205.18.⁴ The policy states the RCs “maintain a cadre of FTS personnel who are primarily responsible for assisting in the organization, administration, recruitment, instruction, training, maintenance, and supply support to the RCs.” The four types of FTS personnel are:

- Active Guard and Reserve (AGR)
- Military Technician (Dual-status) (MT)
- Active Component (AC)
- Civilian Federal Employee (CIV)

MTs are authorized as one of two types: dual-status technician (MT) and non-dual-status technician (NDST). All NDST authorizations are expiring, and remaining personnel will transition to another category of FTS. Contractors are a potential option but not considered for personnel conversions. AGRs, MTs, and NDSTs are authorized annually as maximum populations; FY 2017 NDAA authorizations appear in Table 1.

Table 1. FTS Authorizations for FY 2017

FTS Category	USAR	ARNG	USAFR	ANG	USNR	USMCR	All
AGR	16,261	30,155	2,955	14,764	9,955	2,261	76,351
MT	7,570	25,507	10,061	22,103	0	0	65,241
NDST	420	1,600	90	350	0	0	2,460
Total FTS	24,251	57,262	13,106	37,217	9,955	2,261	144,052

Note: Manpower authorizations from the FY 2017 NDAA.

The Secretaries of the Army and Air Force can detail members of the Active Component (AC) to the National Guard (NG), and AC manpower is currently identified as FTS in all RCs. Civilian personnel are also available as FTS and no authorization limits exist on the quantity of civilians. Table 2 provides a fuller representation of the FTS population, including AC and civilians, as planned for the end of FY 2017.

⁴ DoDI 1205.18, “Full-Time Support (FTS) to the Reserve Components,” updated May 12, 2014. It describes current DoD policy for FTS and records that FTS “consists of Active Component (AC) personnel, Active Guard and Reserve (AGR) personnel, military technicians (MTs) (dual status), non-dual status technicians (NDSTs); and other federal civilian employees (CIV).”

Table 2. FTS End Strength for FY 2017

FTS Category	USAR	ARNG	USAFR	ANG	USNR	USMCR	All
AGR	16,261	30,155	2,955	14,764	9,955	2,261	76,351
MT/NDST	7,990	27,107	10,151	22,453	0	0	67,701
AC	66	107	392	27	1,062	3,778	5,432
CIV	3,083	1,021	3,768	1,313	818	272	10,275
Total FTS	27,400	58,390	17,266	38,557	11,835	6,311	159,759

Note: Manpower quantity as planned in the FY 2017 Service budget justification FTS end strength exhibits. Numbers may differ slightly from authorizations and certain budget exhibits.

Although the focus of this report is on MT and AGR personnel, civilians are included because of recent turbulence associated with the potential conversion of up to 20 percent of MTs to civilians. Provided in Chapter 2 are brief descriptions of each type of FTS and the current workforce, followed by a discussion of management and readiness factors, and cost estimates. The cost estimates are the focus of this paper in response to the analysis requested in the FY 2017 NDAA.

The population considered in this paper appears in Table 3. The table includes FY 2017 authorizations for AGR, MT, and NDST, and projected FY 2017 end strength for civilians from the FY 2017 military personnel budget material. A working group was assembled by the office of the Assistant Secretary of Defense (Manpower and Reserve Affairs) to provide opportunity for RC experts to collaborate with the research team on multiple topics including workforce mix. RCs were given opportunity to adjust numbers; however, no major changes were made. AC manpower within the four RCs assessed in this report would not be affected by any changes and is therefore excluded. All NDST authorizations are treated as civilian going forward unless permanently eliminated.

Table 3. FTS Analysis Population for FY 2017

FTS Category	USAR	ARNG	USAFR	ANG	All
AGR	16,261	30,155	2,955	14,764	64,135
MT	7,570	25,507	10,061	22,103	65,241
NDST	420	1,600	90	350	2,460
CIV	3,083	1,021	3,768	1,313	9,185
Total FTS	27,334	58,283	16,874	38,530	141,021

Note: Manpower quantity from FY 2017 NDAA authorizations and planned in the FY 2017 Service budget justification FTS end strength exhibits. Some numbers may differ slightly from certain exhibits.

In the process of answering the questions from the FY 2017 NDAA, the IDA team examined personnel types, management processes, personnel administration, readiness, retention, and many other related issues. The results from this supporting research are included in management and readiness issues discussed in this paper.

2. Full-Time Support

Chapter 2 provides descriptions of current FTS manpower available to the RCs, with a focus on AGR and MT. Although the mix of FTS has changed within individual RCs over the last 20 years, the total FTS population—AGR, MT, AC, and civilian—has only slightly increased. Total FTS end strength as reported in the RC budget justifications from FY 1997 to FY 2017 appears in Figure 1.

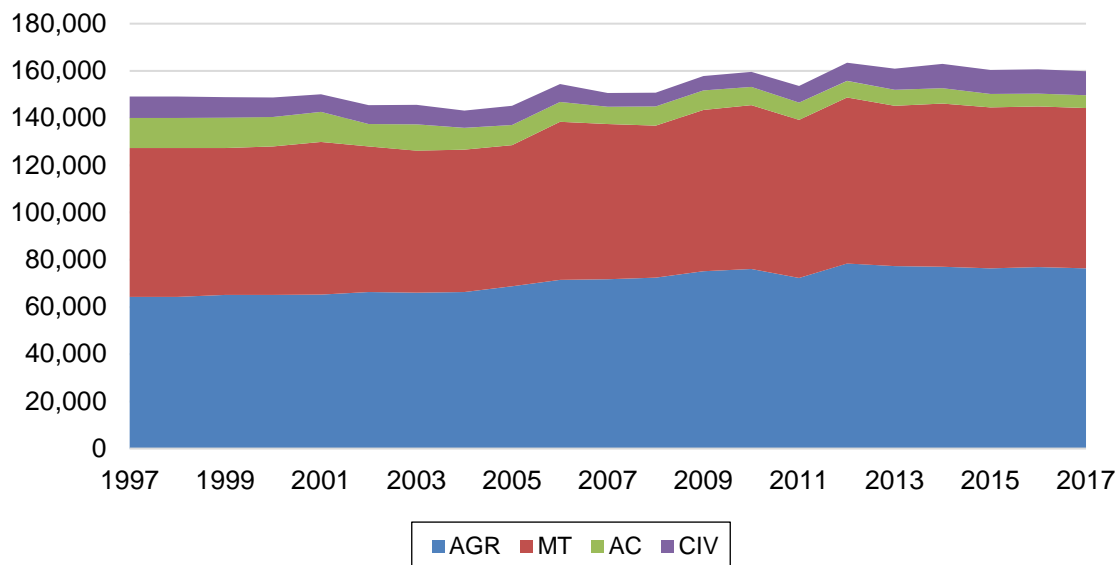


Figure 1. FTS End Strength for All RCs for FYs 1997–2017

DoDI 1205.18 is a primary reference for defense-wide policy for the management of FTS programs. Additional guidance appears in RC regulations and law, primarily in titles 10 and 32 United States Code (U.S.C.). DoDI 1205.18 describes FTS personnel as “personnel assigned to organize; administer; instruct; recruit and train; maintain supplies, equipment, and aircraft; and perform other functions required [daily] in the execution of operational missions and readiness preparations” as authorized in titles 5, 10, and 32 U.S.C.⁵ This definition provides latitude in duties and mix, although Services and

⁵ DoDI 1205.18 notes that a requirement of some FTS is to be assigned to a military position within a unit where the assignment is compatible, or occupationally similar, to day-to-day full-time responsibilities.

Components also provide unique instruction, and such guidance can be as restrictive, or more restrictive, than the DoDI.

End strength by RC for AGRs, MTs, AC personnel, and civilians for FY 1997 through FY 2017 are reported in Figure 2 (projected for FY 2017).⁶ The Army RCs show clear changes over the 20-year period and represent most of the increase in FTS personnel.

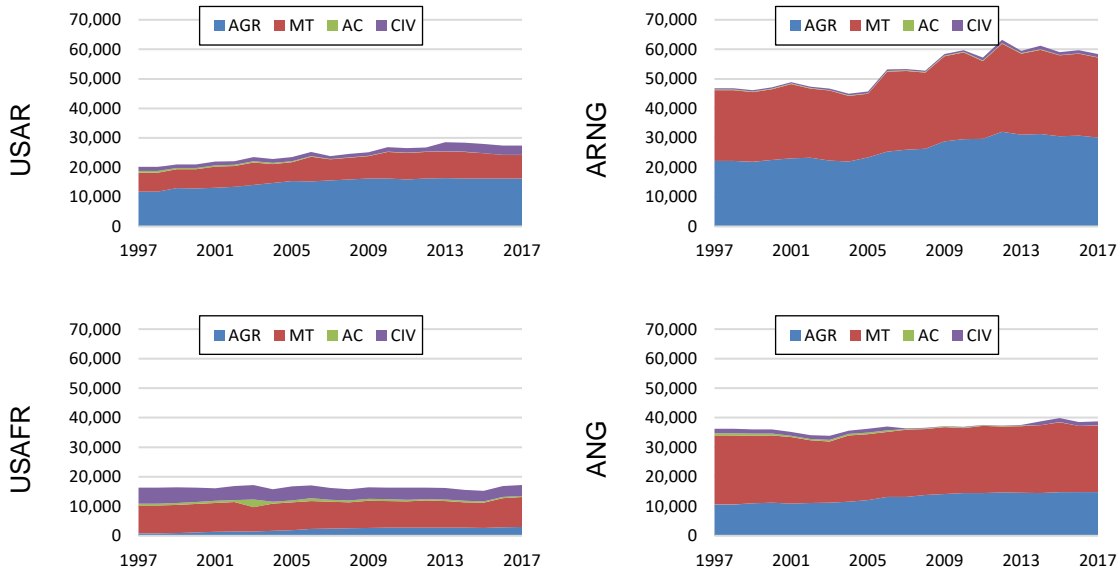


Figure 2. FTS End Strength by Reserve Component

Figure 3 provides a slightly different perspective on FTS as a percentage of RC Selected Reserve (SELRES) end strength. AGRs and MTs combined as a percentage of RC end strength have increased over the 20-year period for all RCs. FTS in total as a percentage of SELRES end strength has however remained relatively stable over recent years, following increases in the early years of the 20-year period.

⁶ Some quantities may slightly differ from other sources; however, all values represent end strength as reported in the budget justification documents or NDAA authorizations.

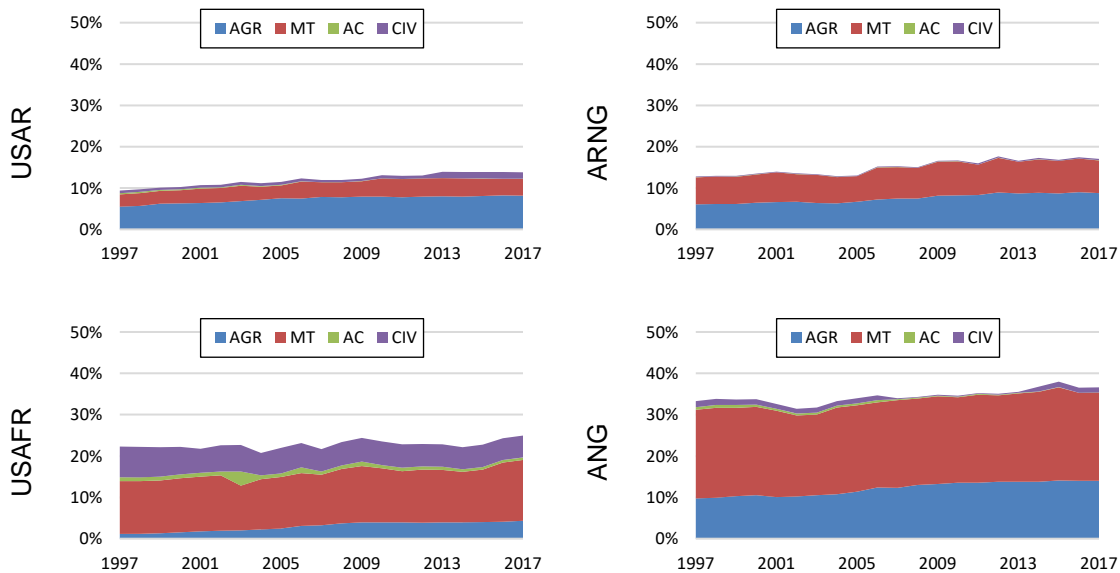


Figure 3. FTS Percentage of Selected Reserve Authorizations by Reserve Component

This stability does not necessarily reflect a requirement for FTS personnel that is fully resourced. As recently as 2012, the Secretary of the Army reported in a memo accompanying a report to the House Armed Services Committee “using standard Army business practices, that analysis determined Full-Time Support authorizations meet 62% of current requirements.”⁷ It is not the intent of the IDA research to assess appropriate FTS resource levels or determine fully resourced requirements.

A. Full-Time Support Personnel Types

The four primary types of FTS manpower are described with a focus on AGR and MT personnel. Additional personnel options are briefly discussed.

1. Active Guard and Reserve (AGR)

AGRs are full-time Active Duty, authorized to maximum levels under title 10 U.S.C. in the Reserves and title 10 or title 32 U.S.C. in the NG. AGRs are compensated primarily through the military personnel (MILPERS) appropriation and count against total RC end strength. Participation in Inactive Duty Training (IDT) and Annual Training (AT) is required for AGRs except for those performing duty separate from operational units. Participation may be authorized if it does not interfere with primary duties. AGRs should

⁷ Letter from Secretary of the Army John M. McHugh to the Committee on Armed Services, United States House of Representatives accompanying the report on the required level of Full-Time Manning for the Reserve Components. September 17, 2012.

fill positions that are inherently governmental, militarily unique, require military incumbency, involve career development, are overseas, or involve unusual working conditions, per DoD policy and procedures for determining workforce mix (DoDI 1100.22).⁸

The AGR program is managed as a career program, as directed in DoDI 1205.18, and may include tours of two to three years, and up to five years, with permanent movement possible. Upward progression is required and placement usually involves competitive positions. Promotions are contingent on meeting qualifications: education, experience, and command. If passed over repeatedly for regular promotion, it is usual to retire or separate. While full-time separation may not affect RC unit affiliation, a new full-time position, in government or the private sector, is likely required. AGRs may be employed under a probationary period from three to six years.

AGRs on orders are available 24 hours per day, 365 days per year. Overtime pay is unavailable and mission dictates work schedule. AGRs are deployable with a unit or individually. NG AGRs ordered to Active Duty under title 10 U.S.C. are generally relieved from duty within their State, Territory, or District.⁹ An AGR can accomplish other duties as assigned to the extent there is no interference with primary duties (10 U.S.C. § 12310 and 32 U.S.C. § 328). This permits some flexibility to use an AGR in domestic response, emergency, homeland defense, and other missions usually for less than 180 days.¹⁰

2. Military Technician (MT)

Military technicians are authorized under title 10 U.S.C. in the Reserves and title 32 U.S.C. in the NG. The Congress created the program under the National Guard Technician Act of 1968, which applied only to the National Guard. The law¹¹ designates, through the

⁸ DoDI 1100.22, "Policy and Procedures for Determining Workforce Mix," April 12, 2010. AGRs are typically assigned at the Modification Table of Organization and Equipment (MTOE) unit or troop level; Battalion (BN), Brigade (BDE), and Headquarters (HQ) positions; and Table of Distribution and Allowances (TDA) units as generalists. Certain dedicated missions may be preferred for AGRs. AGR duty and assigned positions should be professionally compatible.

⁹ AGRs may not be relieved if the president authorizes service in both duty statuses and the Governor consents to such service (32 U.S.C § 325).

¹⁰ MTs may be used in temporary and term assignments. AGRs may be used in a somewhat similar flexible fashion as Active Duty for Operational Support (ADOS) for limited duration assignments.

¹¹ Pub. L. No. 90-486, "National Guard Technician Act of 1968," August 13, 1968. In 1960, the "dual status program" for Army Reserve civilian technicians was established by a memorandum of understanding between the Department of the Army and the former US Civil Service Commission. In 1970, a new memorandum of understanding was approved, which stated that MTs should be members of the same Reserve units in which they work. It was not until October 1996 that title 10 U.S.C. 10216 codified that Reserve MTs shall be authorized and accounted for as a separate category of civilian employees.

Service Secretaries, the Adjutant Generals (TAGs) of each state to employ and administer the NG technician program. Two types exist—MTs are employed in “excepted service”¹² civilian positions requiring membership in the NG (32 U.S.C. § 709 (d)) or “competitive service” civilian positions requiring membership in the Reserves (10 U.S.C. § 10216 (b) (3)) and NDSTs are employed in “competitive service” civilian positions where RC membership is not required. NDST authorizations are expiring, and remaining NDSTs are transitioning to other positions.¹³

MT end strength authorizations are maximums; they are primarily compensated through the operations and maintenance (O&M) appropriation, and O&M resourcing is the primary limiting factor. No resources can be used to fund an MT unless the MT fills a position that is within the number authorized by law for each RC. A condition of MT employment is maintaining membership in the SELRES or NG. MTs earn military compensation through the MILPERS appropriation. MTs count against RC end strength and must participate in IDT and AT. MTs in the NG are administered by TAGs, who influence compensation, grievances, and separations (32 U.S.C. § 709(f)).

If RC affiliation is lost, for reasons such as failure to meet certain standards, full-time employment is lost (10 U.S.C. § 10216 (a)(1)(b), 32 U.S.C. § 709 (b)).¹⁴ Perceptions that MTs remain in positions for extended durations may support placement in positions that prefer specialty retention such as maintenance, supply, and accounting. Factors such as mandatory retirement dates for Active Duty military may make some positions preferably MT; positions may be subject to classification, review, and alignment with unit positions.¹⁵

MTs can be deployed voluntarily or involuntarily with their unit or individually. MTs belong to one of four “tenure” groups for seniority purposes¹⁶ and may qualify for return

¹² “Excepted service” positions do not require the individual to be hired to follow the typical Office of Personnel Management (OPM) hiring processes, whereas “competitive service” positions must follow the OPM government hiring processes.

¹³ As NDSTs are phased out, retention for MTs who lose military qualification due to a combat-related disability under 10 U.S.C. § 10216 (g) will change.

¹⁴ Army and Air Force *may* compensate an individual (MT) who is no longer a member of the SELRES for up to 12 months if the Secretary determines that such loss of membership was not due to failure to meet military standards (10 U.S.C. § 10216 (e) (2)).

¹⁵ According to DoDI 1205.18, “Army Reserve and Air Force Reserve **non-unit** military technicians must maintain membership in the Selected Reserve of the RC in which they are employed.” This is a distinction from the NG.

¹⁶ MTs are assigned to one of four tenure groups. Group 0 is the least senior and generally contains temporary hires for less than one year. Group 3 is the second least senior and includes indefinite employees for periods of one to four years. Trial or probationary hires appear in group 2 and transition to the highest seniority group (1) if they pass the probationary period. Tenure group 1 includes full-time hires.

rights for up to five years to their original position, or a similar position if the original no longer exists. MTs can respond to emergencies and other missions with whole or part of their unit if the “additional duties” do not interfere with their primary duties (10 U.S.C. § 10216 (a); (3) 32 U.S.C. § 709 (a) (3)). Union membership is permitted, and MTs may be hired for temporary or term positions.¹⁷

3. Active Component (AC)

AC, authorized under title 10 U.S.C., are full-time and managed as a career program. Members are compensated primarily through the MILPERS appropriation. AC includes experienced professionals available for a range of assignments and can be deployed to support operations. AC manpower used for FTS purposes counts against the total end strength for the AC and is subject to end strength reductions and funding restrictions. AC is most commonly used by the USNR and USMCR; however, experience with USAF “associate” units suggests possible integration of AC and RC in other RCs.¹⁸

4. Civilian (CIV)

Civilians (CIV) are employed primarily through title 5 U.S.C., funded under the O&M appropriation, and constrained by available resources rather than by authorizations. Civilians are managed by the Services, and changes to civilians should follow established DoD and Service requirements and validation. Per 10 U.S.C. § 129a, the civilian workforce shall be managed solely based on workload and funding, with reductions in funding equating to reductions in positions. Civilians inhabit positions that are inherently governmental and generally cannot be contracted unless restricted by law and other considerations. Civilians may receive overtime compensation.

DoD civilians are not required to maintain membership in an RC; they can be a member of an RC but their full-time position is not contingent upon membership. Title 5 U.S.C. employees are more flexible, at least relative to the NG: title 32 U.S.C. civilians do not typically move from state to state while title 5 U.S.C. civilians might move commonly between states as positions become available. Civilians are deployable under some

¹⁷ Temporary and term MT flexibility may provide a degree of flexibility not available from AGRs; this is likely a management consideration of the program as to how it handles temporary and term technicians who have an impact on average salary estimations used in the budget request. These are not reported in a separate category in the budget submissions unless they are linked to unit deployments.

¹⁸ According to 32 U.S.C. § 315, the Secretaries of the Army and Air Force can detail members of the AC to the NG. Per the ARNG reform initiative (Title XI of the 1993 NDAA) under 10 U.S.C. § 10105, authorizations are limited to a maximum of 5,000 AC in all Army RCs. All RCs face limits on the use of AC domestically under the Posse Comitatus Act (18 U.S.C. § 1385) and Insurrection Act (10 U.S.C. §§ 331–335).

circumstances, and Directive-type Memorandum (DTM)-17-004¹⁹ provides options for developing deployable civilian personnel and associated operational requirements. Changes to 10 U.S.C. § 10508 in the FY 2017 NDAA grant the Chief of the NG Bureau (CNGB) enhanced authorities over civilian employees and AGRs, which he may sub-delegate to the TAGs (who then may be designated these authorities).²⁰

5. Other Personnel

a. Contractors

Although contractors are notionally capable of filling some FTS positions, they are not officially recognized as FTS according to DoD policy. Contractors provide services per contract agreement generally through the O&M appropriation, but unlike defined FTS, are not to be used for inherently governmental duties.²¹

Contracts are comparatively flexible, can run for short durations to a decade, and do not require some personnel administrative functions such as recruiting. Contractors are not affected by furloughs, have limited restrictions during government shutdowns, and can be deployed to support operations. Recent restrictions on contractor competitions, such as those described in Office of Management and Budget (OMB) Circular A-76, Public-Private Competitions,²² potentially make contractors less attractive as an FTS alternative.

Other potential alternatives to strictly defined FTS are state employees and Non-Appropriated Funded (NAF) personnel.

b. National Guard Grants and Cooperative Agreements

NG Regulation (NGR) 5-1²³ defines the nature of NG grants and cooperative agreements (CAs)—assistance relationships—between the Grantor United States Property

¹⁹ Directive-type Memorandum (DTM)-17-004, “Department of Defense Expeditionary Civilian Workforce,” January 25, 2017.

²⁰ Commensurate with the Intergovernmental Personnel Act of 1970, 42 U.S.C. § 4701 and regulations prescribed by the CNGB (subject to OSD workforce policy) these civilians will be subject to administrative actions separately from regular federal civilians. This may require a review of the policy, regulations, and laws that currently govern DoD civilian personnel and OPM’s role in these processes.

²¹ The Defense Federal Acquisition Regulation (DFAR) directs that no contractor will be used for inherently governmental duties. “Contracts shall not be used for the performance of inherently governmental functions.”

²² Assistant Secretary of Defense (Manpower and Reserve Affairs), Memorandum, “Update on OMB Circular A-76 Public-Private Competition Prohibitions – FY 2016,” dated April 21, 2016.

²³ NGR 5-1, “National Guard Grants and Cooperative Agreements,” May 28, 2010. CAs may be funded through appropriations for “other programs authorized by Congress or the DoD to be performed by grantees in support of the NG.” Some agreements (Military Construction cooperative agreements, Army

and Fiscal Officer (USPFO) and Grantee State or Territory. Common CAs cover facilities operations and maintenance, environmental program management, security guard activities, electronic systems operations and maintenance, and logistics and range management. Individuals employed under CAs are dual-status: federally funded but employed by the state in careers such as firefighting, law enforcement, and security.

B. FTS Manpower Data

Each RC FTS community represents one of six unique populations, administered and managed differently and identified as a separate case: USAR, ARNG, USAFR, ANG, USNR, and USMCR. Only the Army and Air Force cases are considered in this paper, given the lack of MTs in the USNR and USMCR. Each case is different in demographics, professional responsibilities, and management policies. These differences inform management and readiness issues, but more importantly, are principal factors in influencing the relative costs of different workforce mixes. Because this paper considers specifically options for transition of the existing workforce, it was important that FTS manpower data for each community of FTS be included as input to the cost estimates.

Most FTS data used in this report were provided by the Defense Manpower Data Center (DMDC) in three distinct data files: Civilian (1,629,196 records), Reserve (5,341,415 records), and Active (494,583 records). The data were selected by DMDC and contain individuals identified by DMDC as MT or AGR from FY 1995 through FY 2016. Although the project team worked with DMDC to identify the data required for the report, the final criteria used by DMDC to select AGRs and MTs for the relevant time period are not certain.

There were three main challenges with the data: access, identification, and interpretation. Gaining access to the data was an ordered but lengthy process and required more than three months of collaboration with DMDC, from initial communication to delivery of data. Following delivery, IDA treated the raw data as containing personally identifiable information (PII), and only non-PII aggregations are used in the paper. Identifying AGRs and MTs in the delivered data required examination of multiple fields. Although some data dictionaries were available, some information had to be assembled through additional research to produce a more complete description of the data files.

- AGRs were marked by a Reserve Category Code and an Authorization Code in the Reserve file; however, the Authorization Code was commonly marked “Unknown,” so the Reserve Category Code was used to select AGRs.

Compatible Use Buffer and special military projects) are executed with state/local governments or nonprofit agencies.

- MTs were marked in both the Reserve file and the Civilian file, but markings were inconsistent. The primary criterion used to select MTs was that the individual be marked as an MT in the Reserve file with a corresponding record in the Civilian file.
- Some individuals in the Reserve file were marked both AGR and MT. In these cases, the individual was marked as an MT if there was a corresponding record in the Civilian file for the given year; otherwise, the individual was marked as an AGR.

With the distinct populations identified, interpretation of field values followed. Additional detail within available dictionaries often improved interpretation of assigned values, such as for occupation and career information. Comparisons of the DMDC dataset to separately reported data on rank and grade, occupation, and total population were completed for available alternative sources. The comparisons were positive and the data were similar for all factors considered.²⁴ That noted, given the uncertainty in the data, the dataset should be considered as a representative sample rather than a definitive subscription. Additional supporting data were sourced from OPM, DMDC public reports, and historical budget and NDAA documentation.

In the following manpower data sections, primary sets of demographic data derived from the DMDC dataset are introduced, including, for each population, means and population distributions for:

- Military rank
- Civilian grade
- Age and service time

Factors are described for each of the four germane RC cases: USAR, ARNG, USAFR, and ANG. Each demographic factor includes population means for each type of FTS, followed by complete distributions for selected descriptive factors.

1. Military Rank

Table 4 shows that AGRs are, on average, senior to MTs, and MTs are, on average, senior to the general military population of each RC, including all SELRES members. Important for application to cost differences, the difference in rank means between AGRs and MTs varies by RC.

²⁴ Community sizes derived from the DMDC data compared favorably against reported population sizes for the same fiscal years in historical NDAs and budget documentation. Population characteristics, such as occupation and career descriptors for MTs, were consistent with previously reported data.

Table 4. AGR and MT Mean Military Rank for FY 2016

FTS	USAR		ARNG		USAFR		ANG	
	AGR	MT	AGR	MT	AGR	MT	AGR	MT
Officer Ranks (1–10)	4.1	3.6	4.1	3.9	4.7	4.5	4.4	4.0
Warrant Ranks (1–5)	3.1	2.6	3.1	2.9	N/A	N/A	N/A	N/A
Enlisted Ranks (1–9)	6.4	6.4	6.5	5.9	6.6	6.5	6.5	6.1

Note: Means derived from DMDC-reported data for FY 2016.

Distributions by rank are shown in Figure 4 and are a direct input to the cost estimating tool. Relatively senior distributions are more costly, due to higher rank, but also due to other correlated factors including greater years of service.

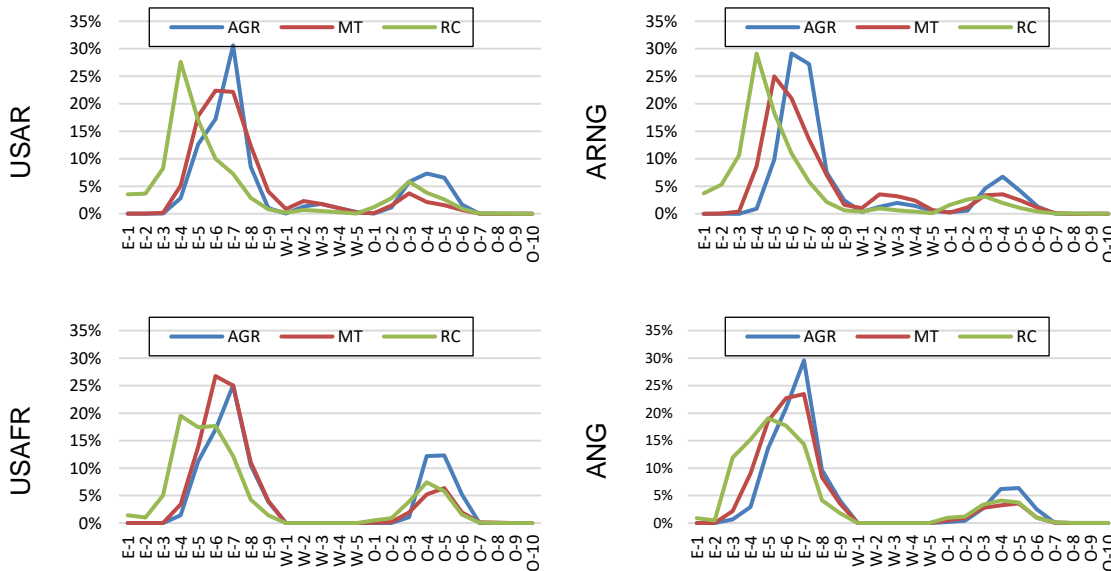


Figure 4. Military Rank Distribution by Reserve Component

The rank distributions describe the baseline populations but also support cost estimates of population alternatives. For example, in a complete MT transition to AGR, the MT military rank distributions, combined with existing AGRs, describe the workforce alternative community of 100 percent AGRs.

2. Civilian Grade

A second important factor is civilian grade, including grade by military rank, reported on average in Table 5. This report considers civilian grade by pay system: General Schedule (GS) and Federal Wage System (FWS). Cost estimates for communities of AGRs and MTs depend on the spread between rank and grade, which varies significantly across cases. For example, wage grade (WG) civilians in the FWS grade at a mean of WG-9 in

the USAR and WG-10 in the ARNG for similar enlisted ranks. This difference supports a larger cost effect in the USAR relative to the ARNG in a transition from MT to AGR.

Table 5. MT Mean Civilian Grade by Military Rank for FY 2016

FTS		USAR		ARNG		USAFR		ANG	
		Rank	Grade	Rank	Grade	Rank	Grade	Rank	Grade
GS	Officer (1–10)	3.6	10.0	3.9	11.8	4.5	12.8	4.0	12.5
	Warrant (1–5)	2.7	10.4	2.9	11.4	N/A	N/A	N/A	N/A
	Enlisted (1–9)	6.6	8.4	6.0	8.5	6.8	9.2	6.2	9.5
WG	Officer (1–10)	3.2	9.4	N/A	N/A	N/A	N/A	N/A	N/A
	Warrant (1–5)	2.2	9.7	1.8	10.7	N/A	N/A	N/A	N/A
	Enlisted (1–9)	5.8	8.9	5.6	9.7	5.8	10.4	5.6	10.4

Note: Means derived from DMDC-reported data for FY 2016. Wage Leader and Wage Supervisor pay grades not included.

Figure 5 expands on the mean grades in Table 5 and includes complete grade distributions by MT compared to all Service Department (Army and Air Force) civilians for each RC. The unique nature of the MT population relative to the general civilian population is immediately evident. In most RCs, MTs are concentrated in the FWS, with “WG-10” being the most common grade across the combined RCs at nearly 20 percent of all MTs. The USAR breaks this pattern, in that many of its MTs are lower-grade GS, commonly “GS-07,” rather than in the FWS.

The difference between Department civilians and MTs is consequential for cost purposes, and RC MTs would be expected to exhibit relatively lower GS salaries and equal or relatively higher FWS salaries based on the reported trends. For cost comparison purposes, RCs with relatively less senior civilian distributions exhibit larger cost increases in an MT transition to AGR.

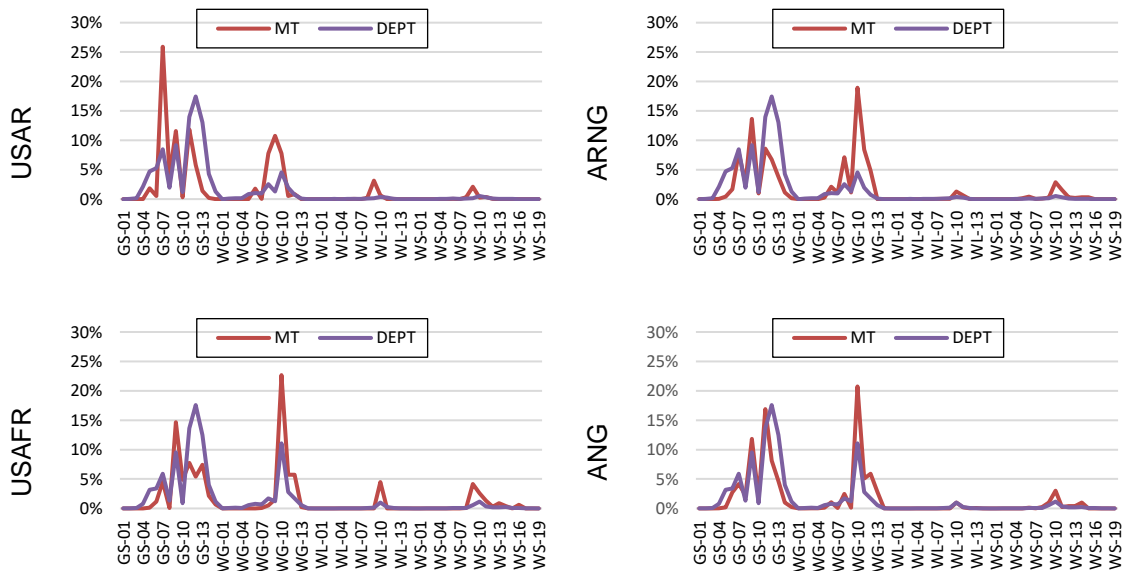


Figure 5. Civilian Grade Distribution by Reserve Component

3. Age and Service Time

The final highlighted demographic factor is Service member age. Age distributions provide insight into the seniority of the workforce, with potential transition effects for both management and readiness. Mean age and related factors for each of the four cases are displayed in Table 6, with complete age distributions displayed in Figure 6. Where the means differ substantially are in factors derivative of Active Duty service, including military retirement points and years of Active Duty military service.

Table 6. AGR and MT Mean Age and Service Durations for FY 2016

FTS	USAR		ARNG		USAFR		ANG	
	AGR	MT	AGR	MT	AGR	MT	AGR	MT
Age	39.8	40.7	39.5	39.1	39.2	38.7	39.4	40.5
Years of Reserve Duty	16.8	17.2	17.5	16.5	17.3	16.8	17.0	17.9
Years of Active Duty	11.7	5.9	12.3	4.9	11.7	4.9	13.4	7.4
Years of Federal Service	N/A	12.6	N/A	11.6	N/A	12.2	N/A	14.8
Retirement Points	4,609	2,989	4,719	2,599	4,741	2,707	5,043	3,569

Note: Means derived from DMDC-reported data for FY 2016. AGRs may have additional federal service.

Age means show very little variation between AGRs and MTs. Expected AGR and MT patterns (MTs having older personnel) are more evident in the age distributions. All RCs indicate an additional fraction of MT personnel age 50 and above relative to AGRs. However, the magnitude of this difference is not consistent across RCs, with the USAFR

presenting nearly 25 percent of MT personnel at or older than 50 years of age. As such, this difference indicates another potential need for consideration of RC-tailored approaches during a transition.

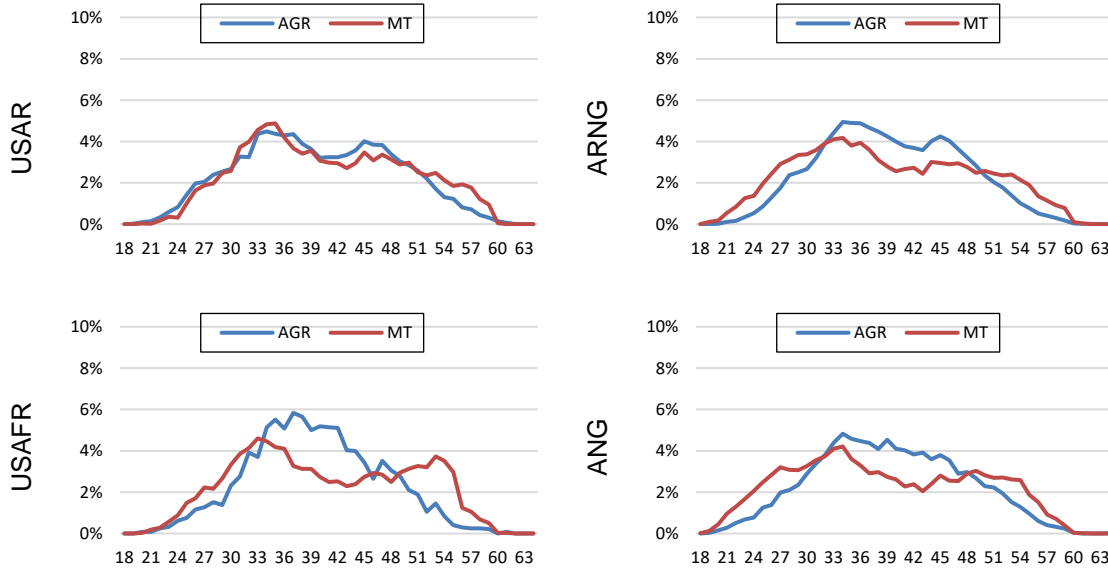


Figure 6. FTS Age Distribution by Reserve Component

Other factors of each RC not reported but influential to differences in cost include military and civilian occupation, duty location, experience level, etc.

3. Management

The purpose of this chapter is to identify management challenges that might be encountered in determining an appropriate FTS workforce and transitioning to a new mix of personnel. The majority of topics were raised by the working group and its associated subject matter experts (SMEs). Most RCs by the late 1960s established FTS with the mission to enhance and increase unit readiness. The Navy and Marine Corps chose to use AGRs²⁵ to enhance unit reserve readiness, while the Army and Air Force entered agreements with the US Civil Service Commission on the use of MTs. The NG MT program was established in law (32 U.S.C. § 709) in 1968 separate from the Reserves.

Given resource challenges during the 1970s, the Defense Manpower Commission, created in 1973, provided a report in 1976 to the president and the Congress entitled “The Keystone of National Security.” Its focus was on the increased costs of military manpower. These cost increases were influential to the creation of a 1978 “Report on Full-Time Training and Administration of the Selected Reserve”²⁶ to assess FTS. Its topics remain relevant and it is repeatedly referenced to highlight recurring issues with FTS. The following management factors are influenced by this 1978 report’s framework:

- Workforce mix
- Personnel administration
- Command and control
- Programming and budgeting
- Personnel transition

A. Workforce Mix

DoDI 1100.22 is the OSD-level guidance on developing an appropriate workforce and should be referenced by the RCs to develop FTS mix proposals. All mixes assessed for cost in this paper have been influenced by reporting requirements in the FY 2017 NDAA, or proposed by the OSD sponsor or the Components.

²⁵ AGR is the common term as of this report; however, the abbreviations TAR (Training and Administration of the Reserves) and FTS (Full-time Support) have been used by the Navy and Marine Corps, respectively.

²⁶ Assistant Secretary of Defense (Manpower, Reserve Affairs & Logistics) (ASD(M&RA)), “Report on Full-Time Training and Administration of the Selected Reserve,” June 1978.

The decision process used by DoD to determine the type of manpower needed to perform specific work involves three questions relevant to FTS: first, determining what positions require military incumbency; second, determining what positions require civilian employees; and third, determining when contract services should be used. As stated in DoDI 1205.18, planners should “fill all FTS positions that do not require military FTS personnel only with civilian personnel or NDSTs.”²⁷ With NDSTs expiring, all non-military requirements should be filled with civilians or contractors.

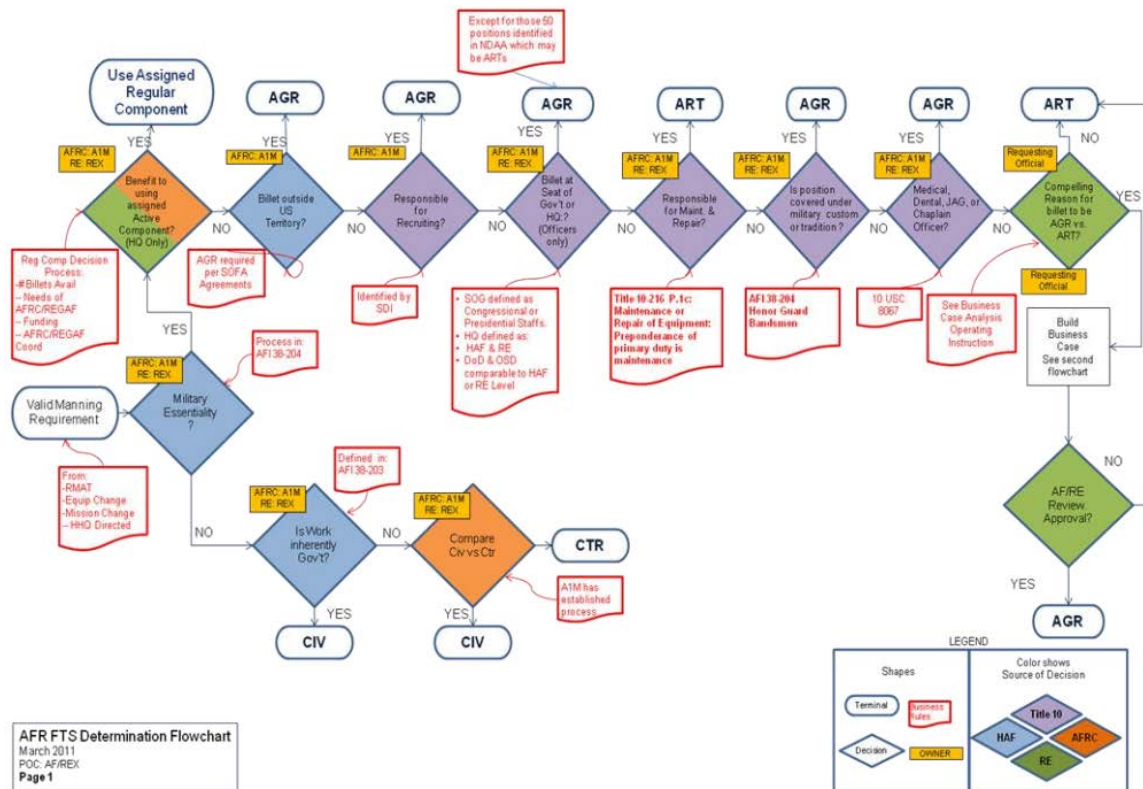
The workforce should be structured with sufficient manpower to satisfy projected demands that cannot be met in sufficient time by mobilizing, hiring, recruiting, or reassigning DoD personnel or contractors. Thus, the RCs should determine mix based on mission, readiness requirements, and needed capabilities.²⁸ All forms of FTS should be included in these determinations or planners risk less effective solutions. A holistic approach should be used to determine mix options that would successfully execute missions at an appropriate level of risk (10 U.S.C. § 129(a)). Each RC today employs a different FTS mix, demonstrated in the datasets associated with each of the four RC cases. These unique mixes should be based on mission requirements, capabilities, and DoD and Component guidance.

Each RC currently is responsible for Component-specific policies and procedures supporting the FTS workforce. (It is not the intent of this paper to review or catalogue these policies across the RCs.) However, Air Force Instruction (AFI) 36-2132²⁹ is an example of a holistic approach to determining workforce mix. Attachment 3 to the Instruction, “Determine Status of FTS Positions,” shown in Figure 7, lays out a sensible framework, influenced by DoDI 1100.22, to determine the personnel type status of FTS positions as identified by law or policy.

²⁷ If the quantity of civilian personnel is greater than the current quantity of civilian and NDST personnel, and additional positions are identified as not requiring military personnel, then there may be unit fill challenges during transition as FTS shifts to civilian and leaves military units. For states, this may require cross-leveling and recruiting efforts.

²⁸ Generally, if there is a Military Occupational Specialty (MOS)/Air Force Specialty Code (AFSC) associated with an occupation, such as for an MT, there is a corresponding military structure (unit, squadron, specialty) associated with the position. IF an MT position is converted to a civilian, and designated as not militarily essential, there may need to be changes to the force structure.

²⁹ Air Force Instruction (AFI) 36-2132, “Full-time Support (FTS) to the Air Force Reserve,” March 23, 2012.



Source: Air Force Instruction (AFI) 36-2132, "Full-time Support (FTS) to the Air Force Reserve," Attachment 3, Table A3.1. March 23, 2012.

Figure 7. Example of Decision Process to Determine Status of FTS Positions

The FTS mix alternatives proposed by each of the four RCs in this paper should be a consequence of decision processes such as that shown in Figure 7.³⁰ Questions exhibited in this process example include:

- Is the position military essential? If military essential, designate the position as AGR, MT, or AC. If not military essential, designate the position civilian or contractor.
- If a position is military essential and appropriate to AGR or MT, is the position in maintenance or repair? If yes, designate the position MT, otherwise AGR.

³⁰ Transition to a new workforce mix would necessitate a determination, for example, as to MT positions which meet the criteria in DoDI 1100.22 4f for military only. Such positions would need to be MT or AGR and could not be converted to civilian.

B. Personnel Administration

The most relevant personnel administration challenges are:

- Control grade constraints
- Union-related issues
- Requirement for competitive sourcing
- Adjudication processes
- Reemployment rights
- Accession standards and requirements

The options available to staff FTS positions, evident in Figure 7, demonstrate a relatively high level of administrative complexity, but also flexibility. Full-time needs can be filled from a range of personnel types, and risks with specific types can be mitigated using alternative personnel resourced under different appropriations.

1. Control Grade Constraints

Law limits the quantity of AC and AGR military personnel in control grades for a given RC strength level, with maximum quantities for E-8, E-9, O-4, O-5, and O-6 (10 U.S.C. §§ 12011–12012). Because FTS grades tend to be senior relative to the total RC population, and no increases to the total RC population can be assumed, control grade limits will likely need to be raised if many AGRs (from the current MT population) are added to the FTS population. Alternatively, a reduction in AGRs might support a reduction in control grade authorizations. Changes in workforce mix, unit structure and design, and professional concentrations may justify control grade changes.³¹ There are no control grade limits associated with MTs.

2. Union-Related Issues

AGRs are prohibited by statute (10 U.S.C. § 976) from union membership. MTs and associated unions have negotiated several program aspects, including those of a military

³¹ The 2017 NDAA requires the Secretary of Defense to submit a report: “not later than March 1, 2017, describing how the military departments would propose to use the authority described in § 503 of the Senate-passed bill, a description of the specific categories of adjustments in control grades and the number and percentages of such adjustments desired, and an assessment of the impact of the authority, if implemented, on the desired officer grade composition of the military departments. The report shall specifically address the proposed use of this authority for military intelligence officers, foreign area specialists, judge advocates with a military justice skill identifier, and officers with expertise in cyber matters.”

nature.³² If left unbalanced, bargaining military aspects may diminish readiness goals. The requirement for military membership, compatibility between civilian and military positions, military grade requirements, wearing of the military uniform, and grooming standards are all potential targets for union protest.

a. Furloughs and Shutdowns

AGRs are not subject to furloughs or government shutdowns and are protected under the Feed and Forage Act (41 U.S.C. § 11). MTs may be subject to furloughs; however, law generally exempts MTs from furloughs (10 U.S.C. 10216) and MTs may be designated “essential” by position to support certain exemptions.

Civilians are subject to furloughs and government shutdowns and cannot work unless exempted per OMB, OPM, and DoD. MT authorizations and personnel are generally exempt from requirement for reductions in DoD civilian personnel and can only be reduced as part of military force structure reductions.³³

3. Requirement for Competitive Sourcing

Competitive service and excepted service classifications are linked to the primary mission and nature of the position. A focus for MTs is that all technicians regardless of Service and competitive classification, are employed to provide the day-to-day continuity of critical functions for military operations and readiness.

In the competitive service, civil service procedures may compromise meeting military requirements in recruitment, retention, and management. If current excepted service positions transition to regular federal civilian, a decision will need to be made regarding the classification of the positions: excepted or competitive. Support for a continuing MT program might include stronger legislative language emphasizing the military nature of the MT positions and the justification for excepted designation.

4. Adjudication Processes

Grievance adjudication processes differ between AGRs, MTs, and civilians. AGRs reconcile complaints through the Uniform Code of Military Justice (UCMJ) and—for NG AGRs—states, territories, and districts must ensure adequate state UCMJ authorities.

³² The 1978 ASD(M&RA) report noted that union activities within the technician programs have had an adverse impact upon the military command authority, organizational effectiveness, discipline, and combat readiness of the RC units; the IDA research team reviewed about 30 percent of labor agreements within the NG MT program and found numerous instances where subjects concerning the military aspects of the program had become items for negotiation.

³³ MTs should not be cut simply for financial or total end strength reductions but must be tied to force structure reductions (10 U.S.C. § 10216 (b) (3)).

Amended MT rights pursuant to 32 U.S.C. § 709 resulting from the FY 2017 NDAA § 512, “Rights and protections available to military technicians,” allow NG MTs to have expanded appellate rights outside TAG jurisdiction and under federal civilian processes under certain conditions.³⁴ Appeal right changes cover the Equal Employment Opportunity Commission, the Merit Systems Protection Board, and other rights groups. Additional future suggested reform may include priority placement to protect MTs who lose military status involuntarily.

5. Reemployment Rights

Reemployment rights refer to benefits accorded under “Employment and Reemployment Rights of Members of the Uniformed Services” described in Chapter 43, 38 U.S.C. §§ 4301–4335. Under 38 U.S.C. § 4303(4)(b), the Uniformed Services Employment and Reemployment Rights Act (USERRA) defines the TAG³⁵ as the civilian employer of NG MTs, effectively state employees.

MTs have USERRA rights of reemployment for up to five years and there is a five-year limit on USERRA-eligible absences. This limit is, however, order-dependent, and some orders are exempt from this five-year limitation. If MTs convert to AGRs, there will need to be policy clarification regarding the USERRA rights afforded the converted, both voluntary and involuntary. The Congress may additionally choose to limit, or eliminate, the right of return for MTs who convert to AGRs. While MTs generally have USERRA rights when activated, if they are converted to AGRs, it is not clear they will continue to have return rights to eliminated MT positions.

AGRs do not have return rights to AGR positions, and the provisions of USERRA do not guarantee an AGR on a 10 U.S.C. mission will have an AGR billet on return. USERRA only applies when moving from civilian to military and back to civilian. AGRs may have USERRA rights to a civilian job held prior to becoming an AGR for up to five years.

6. Accession Standards and Requirements

In all conversions, accessions for new or converting personnel are likely necessary. AGRs and MTs may have different accession standards; some current MTs converting to AGR may not qualify under AGR standards. For MTs who do choose to access as an AGR, there may be a need for waivers. For example, the current age limit for USAR-enlisted accessions is 55, and a portion greater than 5 percent of current USAR MTs are 55 or

³⁴ FY 2017 NDAA, § 512, “Rights and protections available to military technicians.”

³⁵ In the case of a NG MT employed under 32 U.S.C. § 709, the term 'employer' means the adjutant general of the State in which the MT is employed" (38 U.S.C. 4303(4) (B)).

older.³⁶ Assuming relief on accessions, the USAFR estimated that 1,000 of its 11,000 MTs, many of whom are pilots and maintainers, could be affected by mandatory separation date limitations if converted to AGR. Retention of some AGRs over 20 years requires a periodic review, and a duration-dependent “up-or-out” culture is not an attribute of MT careers. For MTs converting to AGRs, or civilians to any military position, medical standards may hinder accessions. Most age- and accession-related concerns would, however, retreat under extended conversion timelines.

Security clearance reciprocity between categories of FTS is an additional risk suggested by some representatives of the RCs (additional research would be necessary to clarify clearance processes within individual RCs). Personnel accessing to a new status may require administrative training related to FTS attributes (e.g., legal, benefits, etc.).

The most highlighted concern during collaborative sessions regarding accession was the increased recruiting workload associated with MT conversions to civilian and associated RC personnel losses that would need to be filled.

C. Command and Control

Command and control, as well as personnel “accessibility,” differs across FTS categories. Full-time access to an individual is less restricted if the person is Active Duty military, available 365 days a year, 24 hours a day.³⁷ For the National Guard, both AGRs and MTs fall under the command and control of the TAG; both can be used to respond to domestic operations only to the extent that there is no interference with their primary duties (32 U.S.C. § 328 and 32 U.S.C. § 709).

If not with regular units, NG AGRs may participate in AT and IDT if it does not degrade their full-time job,³⁸ although AGRs may need to be released by their commander. There are entitlement and retirement challenges if orders are altered to place AGRs on State Active Duty (SAD), whereas MTs can use leave to transition rapidly to SAD without a break in orders. Statutes that limit TAG ability to mobilize AGRs for SAD may be modified to allow AGRs to accomplish current MT tasks.

Civilians fall under the overall central management of the Services (training, actions, moves, carrier progression, certification, pay) and currently do not report directly to the TAG. The 2017 NDAA § 932 designates new processes, systems, and policy for the use

³⁶ Army Regulation (AR) 135-18, “Active Guard Reserve (AGR) Program,” December 10, 2003.

³⁷ For example, a requirement for refueling staff during a night exercise or staff for high OPTEMPO air sovereignty missions is more easily filled with persons not restricted by civilian workforce constraints.

³⁸ The counter-drug mission includes AGRs and some do receive relief to drill with their units, but such relief is not necessarily guaranteed.

and management of NG civilians that may mitigate some concerns.³⁹ Growth of civilians may require further expansion of civilian-associated processes in the NG in each of the 54 jurisdictions. Coordination may be necessary between the RCs and OPM to provide training and experience with additional civilian processes in recruiting, pay, training, permanent change of station (PCS), and career oversight.

D. Programming and Budgeting

Programming cycles begin up to two years prior to developing the Service Program Objective Memorandum (POM). This program development process regularly supports changes to authorities, the U.S.C., and similar references. Such changes external to the normal phased cycle risk negative effects and may create situations where funding is not available to compensate or employ some personnel.

During budget execution, the Congress may initiate small intra-year budget adjustments. Some proposed changes to the FTS program, such as short-term, single-year conversions, would constitute major current or next-year shifts across appropriations, authorizations, budget activities (BAs) and sub-activity groups (SAGs). Flexibility varies by appropriation, partially due to BA and SAG limits. For example, as of FY 2016, the Congress imposes a limit on reprogramming of \$15 million (increase or decrease) between BAs for O&M and \$10 million (increase) between BAs for MILPERS. SAGs include additional thresholds as dictated by the Congress.⁴⁰ Movements above these thresholds require a formal reprogramming. RC MTs and civilians are distributed across several SAGs and BAs in the O&M appropriation.

AGRs are primarily funded through MILPERS, which, for all RCs, is a single BA, and MILPERS allows greater flexibility than O&M. Most MILPERS FTS are managed using a Centrally Managed Account (CMA) with oversight and internal controls per DoD FMR Volume 14, Chapter 1. CMAs are managed at the appropriation level rather than decentralized within some RCs (NG) for MTs. A significant change in AGR or MT may require rebalancing resources used to ensure internal control standards.⁴¹ While a short-

³⁹ 2017 NDAA § 932, “Enhanced personnel management authorities for the Chief of the National Guard Bureau.”

⁴⁰ OSD(C), Summary of Reprogramming Requirements Effective for FY 2017 Appropriation, http://comptroller.defense.gov/Portals/45/Documents/execution/reprogramming/Reprogramming_Overview.pdf.

⁴¹ Standards established in Comptroller General of the United States, “Standards for Internal Control in the Federal Government,” GAO-14-704G (Washington, DC: Government Accountability Office, September 2014), commonly known as the Green Book.

term shift is likely attainable, turbulence in the systems, processes, and personnel would be at high risk—with pay stability a specific issue of focus.⁴²

E. Personnel Transition

Collaborative discussions highlighted management-related transition challenges:

- Shorter conversion timelines may be infeasible given limited operational resources in administrative offices as well as stress to the Defense Finance & Accounting Service (DFAS), the Defense Travel System, OPM, supporting contractors, and other organizations.
- Transition administration may create a need for recruiting and accession of new management and administrative staff, as well as retraining and requalification of existing staff, to meet conversion goals.
- Transition policy (reduction-in-force, voluntary, attrition-driven, reorganization, and associated separations) will affect resource requirements. Without a defined transition path, financial and administrative demands remain uncertain.
- Legal requirements regarding any “accrued benefits” where compensation may be required (forced conversions or separations) are unclear; however, conversion volunteers may be asked to give up some benefits, such as reemployment rights.
- Personnel notification requirements may exist under certain conversion plans and are especially applicable to individuals who will not qualify for new positions under a mandatory conversion.
- Changes to FTS categories and quantities may require a change in force structure; there may be a need to adjust unit manning so units can retain the quantity and quality of full-time individuals required to run the unit.⁴³
- Force management changes may be necessary depending on the type of transition; some central support structure may not have sufficient capacity to generate the categories of FTS, types of career fields, etc. needed.⁴⁴

⁴² Previously, turbulence occurred when the RCs implemented mobilization administrative processes for RC personnel, which required rapid execution; pay issues led to an Ombudsman for all Reserve pay to be established and continue for five years before stabilization.

⁴³ Grade reductions are a potential option; such a plan was offered as an option during collaborative sessions. This was proposed as a conversion path for volunteers: for example, a mechanic currently graded E-5 as an MT might be offered an E-4 position as an AGR. Current grade structure is based on manning documents and those documents would need to be updated.

⁴⁴ Collaborative discussions with USAR representatives in the working group noted current AGR administrative structure does not include certain MOS types that are covered by MTs, and the current MTOE structure does not exist to support a complete MT-to-AGR conversion.

4. Readiness

Several attributes of FTS may be considered to contribute to improving the readiness of the RCs. This paper does not assess unit or personnel readiness from a quantitative perspective, but notes some characteristics of AGRs and MTs that may contribute to unit or personnel readiness. The management framework introduced earlier is extended with several possible readiness-contributing characteristics:

- Deployability
- Stability
- Longevity

Readiness assessment would typically include measurements of individual and unit readiness, with supporting analyses of personnel fill, training, and qualification rates. Measuring skill and experience levels of different types of FTS personnel is beyond the scope of this paper. Collaborative discussion emphasized that transition-related turbulence would inherently affect readiness until stability in a new workforce mix is reached.⁴⁵ Component flexibility in planning and implementing a conversion is preferred to minimize effects on readiness, including for individuals who stay as civilians but end their military affiliation.⁴⁶

Several other readiness-related factors were covered in research but are not considered quantitatively in this paper, such as compatibility—which describes the professional similarity between civilian full-time and military part-time positions—and alignment—which measures the similarity between professional experience and position or duty responsibilities. Although higher levels of compatibility (for MTs) and alignment are preferred, benefits to readiness of such higher levels are uncertain.

⁴⁵ From the 1978 ASD(M&RA) report, “Extreme caution is essential in any conversion of the technician systems to an AC FTTA system since turbulent influences and personal trauma will have a negative impact on readiness.”

⁴⁶ For individuals who end military affiliation, accession rates may need to increase to fill vacant positions that must be recruited. No data were provided to support several losses; however, assuming a 20 percent conversion of MTs to civilian, and an associated 20 percent loss rate, total new recruitments would be in the range of 3,000 relative to end strengths in the hundreds of thousands.

A. Deployability

AC, AGRs, and MTs, all can be deployed voluntarily or involuntarily. AGRs and MTs, in headquarters, Table of Distributions and Allowances (TDA), and related organizations, may deploy; however, they may be removed from critical full-time responsibilities when deployed. Deployment readiness may be complicated by personnel in incompatible or non-aligned positions. Some RCs may have individual preferences regarding deployment of certain FTS categories due to Component-specific policy, such as a resistance to AGR deployments,⁴⁷ and those policies may influence existing unit design and manning practices (MT versus AGR).

Civilians and contractors are limited to positions not militarily essential, and those positions may be unavailable for deployment. However, there are situations in which civilians and contractors may be deployed, and processes are available to generate expeditionary civilians and identify civilian positions that support combat operations. DTM-17-004 and the Defense Federal Acquisition Regulation Supplement (DFARS) provide guidance and policy on the extent and ability to deploy civilians.

Stated in DTM-17-004, it is DoD policy to “identify and rely on a mix of capable military members and DoD civilians to meet global national security missions” and to “include DoD civilian employees in the DoD GFM allocation process.”⁴⁸ Furthermore, civilian positions may be designated “Emergency-Essential” (E-E) “to support the success of combat operations or the availability of combat-essential systems” or “Non-Combat Essential” (NCE) “to support expeditionary requirements in other than combat or combat support situations.” Importantly, civilians holding positions with these designations may provide a “directed deployment solution when necessary.”

B. Stability

Stability, within the context of this report, primarily describes the duration an individual stays at a unique unit. Shorter durations may indicate greater turbulence. Stability does not cover risks to retention and recruiting, although they are related.

AGRs serve full-time within a career program and follow career management models that require upward progression. Such career management models will generally limit individual unit tour lengths relative to civilian full-time positions. MTs predominantly follow the civilian career model with performance evaluation and professional certification being driving factors for career progress. Career management models as applied to AGRs

⁴⁷ MTs and AGRs operate under the same FTS umbrella policy and there is little evidence that the AGR program is intended to be less deployable than the MT program.

⁴⁸ As requirements are added to an employee, such as those to train and prepare for deployments, those employees become more expensive. For deployable civilians, they would likely not represent the same sort of cost benefits relative to military personnel as an average federal civilian.

have potentially negative effects regarding continuity and stability as personnel transition between positions and experience PCS moves.

The MT career model can be structured to support (based on policy and management processes) a higher level of stability than Active Duty military. Less career-dependent turbulence may allow MTs to exhibit higher levels of unit-specific experience compared to their Active Duty counterparts.⁴⁹ Although data measuring productivity and experience are not available, a measure of relative stability—duration assigned to a unit—is available. Figure 8 reports duration assigned to units for AGRs and MTs for a 22-year period in the DMDC dataset.

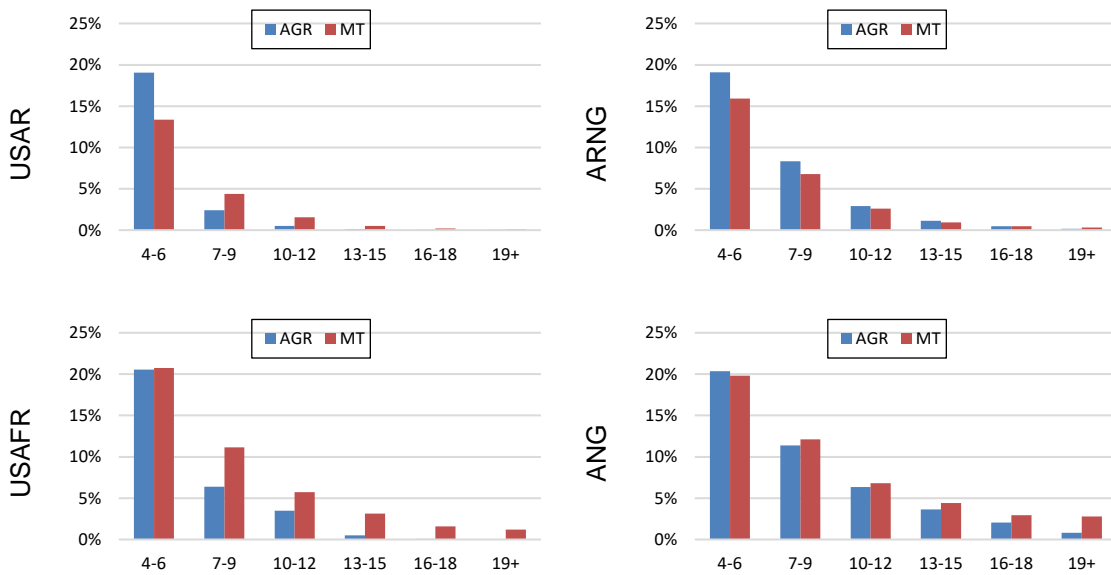


Figure 8. Assigned Unit Tour Durations by Number of Years for FYs 1995–2016

Data presented include tours greater than three years (tours of three years or less are the majority for AGRs and MTs but include temporary and term personnel not necessarily representative of career FTS) at military units assigned in the DMDC Reserve file. Of the unit tours measured over the censored 22-year period, MTs exhibit a pattern indicating longer assignments. Across all RCs, of tours with a duration of 19 years or more, more than 80 percent of those tours are reported as MTs.

Assuming lengthy unit tours are desirable, adding extended tour options for AGRs of 10 years or more, possibly referred to as “stability rotations” or “stability tours,” may

⁴⁹ The assumption that MTs have more experience, or are more productive, because of time-in-position is long-standing. From the June 1978 ASD(M&RA) report on the MT program, “the single most important reason for the higher productivity of the technician when compared to his or her AC counterpart is stability.”

alleviate concerns of administrators reluctant to support a transition from MT to AGR. Alternatively, a small cadre of MTs, or deployable civilians if MTs are eliminated, could continue to cover positions that require long-term stability.

NG representatives expressed concern during collaborative discussions for retention of NG civilians, currently closely linked to the states and territories where they work. Civilians can compete for jobs across federal agencies and locations to obtain career progression. Currently, MTs are administered and managed at the state level and have limited external opportunities. A transition to civilian FTS could challenge retention goals as new DoD and non-DoD inter-state and intra-state opportunities become available, especially for civilians with a desire for career growth.

C. Longevity

Longevity looks past time at a unit to time as a specific type of FTS personnel. This may otherwise be referred to as career length and is a proxy for experience and career stability. MTs may work up to a typical retirement age of 60, and the age distributions shown previously in Figure 6 (on page 17) show some evidence for a greater proportion of MTs than AGRs in their 50s, with associated potential for longer careers.

Figure 9 presents a set of histograms for years of continuous service over the greater-than-20-year duration of the DMDC sample.⁵⁰ Because the sample is censored on both ends, the proportion of individuals with longer careers is biased low. However, for those personnel with reported career durations longer than 19 years, MTs show approximately three times the frequency of AGRs, with concentration in the Air Force RCs.

⁵⁰ For the purposes of this report, a career is described as continuous if there are gaps of two years or less in identification as a specific type of FTS.

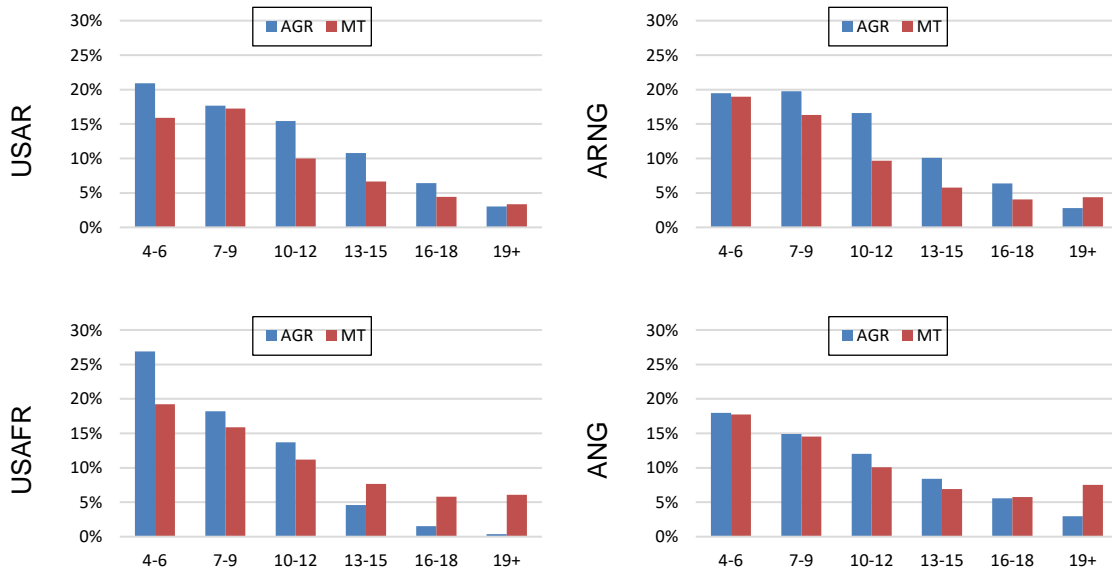


Figure 9. Years of Continuous Service as FTS Personnel for FYs 1995–2016

Accessing experienced, or simply older, professionals in the MT program is described as easier than with the more restricted AGR program. Although longer careers may be a primary benefit of MTs, opportunity to employ older individuals may also be an advantage for MTs relative to AGRs. Additionally, certification for some positions might be more challenging without the continuity and longevity available through MTs for certain specialty positions. Additional research identifying the career fields with more stability personnel might provide some insight on this concern.

5. Cost

Cost is one of the primary workforce decision factors. This paper includes estimates of the average annual cost of individuals of each type of FTS and estimates of the average cost of alternative mixes of FTS manpower. Most guidelines for estimating the fully-burdened cost of defense manpower focus on AC, civilian, and contractor manpower. The cost elements of this report are based largely on practices in DoDI 7041.04, published by OSD(CAPE).⁵¹ The purpose of this instruction is to establish policy, assign responsibilities, and provide procedures “to estimate and compare the full costs of active duty military and DoD civilian manpower and contract support.” The guidance in DoDI 7041.04 is extended to cover FTS personnel categories. Other methodological references include:

- “Eliminating Major Gaps in DoD Data on the Fully-Burdened and Life-Cycle Cost of Military Personnel: Cost Elements Should be Mandated by Policy,” Final Report to the Secretary of Defense, RFPB Report FY13-02, Reserve Forces Policy Board, January 7, 2013
- “Replacing Military Personnel in Support Positions with Civilian Employees,” Congressional Budget Office (CBO), December 2015
- “Costs of Military Pay and Benefits in the Defense Budget,” CBO, November 2012
- Active-Reserve Force Cost Model, IDA

Per DoD guidance, workforce mix alternatives should be defined before developing cost estimates. Our results include alternative mixes derived from reporting requirements in the FY 2017 NDAA, and proposed by OSD and RC representatives consulted during working group collaborations. The costs of specific workforce alternatives are analyzed in this chapter’s final segment. Preceding those analyses are descriptions of the major elements of compensation, benefits, and other costs, as well as detailed average annual cost

⁵¹ DoDI 7041.04, “Estimating and Comparing the Full Costs of Civilian and Active Duty Military Manpower and Contract Support,” OSD (Cost Assessment and Program Evaluation), July 3, 2013.

estimates of each category of FTS. Unless otherwise noted, all cost estimates include the following assumptions:

- One-for-one exchange of manpower types across workforce alternatives⁵²
- Militarily essential FTS designations do not limit the range of potential workforce alternatives
- Equal demographic profiles for individual estimates across all types of FTS
- Average rates for other pays such as special, incentive, award, and overtime
- AC FTS community will not change and is ignored in all cost estimates
- Costs related to activation, mobilization, and deployment are not included⁵³

All individual and workforce mix cost estimates are the product of a cost estimating tool that generates output for five types of personnel: AC, AGR, traditional Reservist (TR), civilian, and MT. Small differences—in the range of 0 percent to 5 percent—between cost estimates are not considered definitive for decision-making purposes.

A. Cash Compensation, Benefits, and Costs

Costs are estimated to two summary forms: DoD program cost and fully-burdened cost. Program cost approximates the cost elements included in the DoD program—costs typically included in a budget. Fully-burdened cost includes all program costs as well as other DoD and federal government costs that may be marginally affected by changes in the workforce in either the short term or long term. Although there is improving agreement regarding the elements of the fully-burdened cost of manpower, or “total cost to the government,” actual cost factors for burdened elements are less certain than for program elements.

Two primary categories of manpower cost are described in DoDI 7041.04: labor costs and non-labor costs. Labor costs include the direct costs of pay and benefits and are

⁵² Although this paper assumes a one-for-one exchange across types, CBO, “Replacing Military Personnel in Support Positions With Civilian Employees,” December 2015 found that “[i]n the mid-2000s, DoD as a whole achieved an average ratio of 1:1.5—that is, two civilians replacing every three service members—when it transferred some 48,000 commercial positions held by military personnel to civilian employees, in part because of the inherent advantages of having civilians in commercial occupations (civilians typically require less on-the-job training, for example) and in part because of some streamlined business practices” (page 2). CBO notes, however, that some efficiencies available in the workforce may now be absorbed by past reductions and such personnel reductions may be less likely in the future.

⁵³ As activation and deployment rates increase, the costs of all military FTS will approach the cost of full-time Active Duty personnel. Inclusion of rotational and deployment rate effects thus would increase the relative cost of civilian-heavy FTS forces. As such, the cost differences represent a lower bound on long-run average cost between AGRs and MTs.

described as costs “either current or deferred, paid either in cash or in-kind...associated with the compensation of a person.” Most labor costs are included in the program cost. Non-labor costs include primarily the indirect costs of shared infrastructure and services and are described as costs “associated with the performance of a task that is not provided to the person(s) performing the task in the form of compensation.” Indirect manpower costs may appear in both DoD and non-DoD organizations. For this analysis, most non-labor costs are treated as indirect costs and are included in the fully-burdened cost.

Overall, most manpower costs are pay-as-you-go, in that they are not deferred for payment in future years. Cost estimates in this paper treat deferred (not pay-as-you-go) costs as funded appropriately in the current year. For example, benefits to veterans after separation provided by the Department of Veterans Affairs (VA) are not pay-as-you-go, but the burdened cost estimates in this report include estimated pay-as-you-go accrual costs for VA benefits as part of the fully-burdened cost estimate.

For decision-making purposes, it is important to consider estimates of both the effective program cost and the fully-burdened cost. Program cost is a more certain measure than fully-burdened cost for direct comparisons of cost estimates. Also, program cost provides a better measure of the actual budget effects for DoD, as well as any cost increases that may require a cost offset if a conversion is planned.

Assuming a path forward includes expected cost increases associated with a conversion, there are several options available to provide offsets:

- Civilian conversions accompanied by a reduction in RC end strength would eliminate the cost of the TR (conversions that require elimination of TRs at 1:1 ratios represent the greatest opportunity for cost savings). The magnitude of TR cost savings are comparable to the magnitude of MT-to-AGR cost increases.
- Transitions from MT to AGR that could be accompanied by changes in the current military rank (voluntary or involuntary) for MTs choosing to convert to AGR could save significant costs, especially in the elements of program cost.
- Replacement strategies that substitute a smaller number of a more expensive type of FTS for a larger number of a less expensive type of FTS could mitigate increased costs associated with the more expensive FTS.
- Targeting specific types of positions in geographic locations with relatively large differences in cost between categories of FTS (such as in areas with a relatively high cost of housing) could mitigate certain recruiting difficulties while limiting the total number of conversions.
- Extended conversion timelines and attrition conversions might provide opportunity to phase cost increases with reductions in other programs.

Table 7 provides a summary of the set of cost elements used across all FTS categories. The cost elements vary slightly from DoDI 7041.04 in category and terminology, but reflect most relevant elements for a combined short-run and long-run cost analysis of manpower.⁵⁴ Each cost element may apply to multiple categories of FTS. For example, the basic pay and salary category under cash compensation includes military pay *and* civilian pay for MT personnel. Costs variable in the short-run constitute most program *and* fully-burdened costs.

⁵⁴ Differences from DoDI 7041.04 include an additional detailed element structure for “non-labor” other DoD indirect costs for civilians, federal government revenue from income and payroll tax collections, and exclusion of certain unfunded liabilities such as for the Civil Service Retirement System (CSRS) and military retirement system.

Table 7. Summary Cost Element Matrix for Full-Time Support Manpower

Category	Variation	Description
Cost to the Department of Defense (Program)		
Cash Compensation (Program)	Short Run	Basic Pay & Salary Housing & Subsistence Allowances Incentive, Special & Other Pays
Benefits & Other Direct Costs (Program)	Short Run	Cost of Living & Other Allowances Retirement Accrual Payments & Thrift Savings Plan Subsistence-in-Kind Federal Insurance Contributions Act Payments Permanent Change of Station & Other Travel Current Medical Care & Health Benefits Other Personnel Benefits & Costs Specific Training (optional) Separation & Severance Pays
Cost to the Department of Defense		
Other Department of Defense	Long Run	Installation Support Personnel Administration Personnel Benefits General Training & Education
Cost to the Federal Government		
Department of Veterans Affairs	Short Run	Veterans Affairs Disability & Pension Veterans Affairs Health Care Veterans Affairs Other Benefits
Department of the Treasury	Short Run	Concurrent Receipt of Retirement & Disability Pay Non-Medicare-Eligible Retiree Health Care (<65) Medicare-Eligible Retiree Health Care Fund (>65)
Department of Education	Short Run	Impact Aid
Office of Personnel Mgt.	Short Run	Civilian Retiree Health Care
Department of Labor	Short Run	Training & Employment of Veterans
Revenue to the Federal Government		
Department of the Treasury	Short Run	Tax Revenue
Cost & Revenue to the State Government		
State Treasury	Short Run	Tax Revenue (no cost)
Cost & Revenue to the Local Government		
Local Treasury	Short Run	Tax Revenue (no cost)

Note: Sources for each cost are listed in Appendix A. Some factors in DoDI 7041.04 are not considered for this paper, such as the costs of unfunded liabilities for legacy retirement systems.

1. Cash Compensation Costs to the Department of Defense

a. Basic Pay and Salary

Cash compensation is the largest factor of the full cost of manpower. Basic pay tables for military personnel by rank and years of service were obtained from DFAS. Reservists and Guardsmen earn basic pay relative to time in training and Active Duty, typically planned at 48 IDTs and 15 AT days per year.⁵⁵ MTs earn both civilian salary and military pay as a Reservist or Guardsman. According to the 2017 NDAA, AGRs will no longer be paid for AT in AGR status.

Salary data for GS civilians come from OPM, with data for appropriated fund FWS civilians provided by the Defense Civilian Personnel Advisory Service (DCPAS). For GS civilians, salary is estimated by grade assuming step 5 of 10.⁵⁶ FWS civilians assume an average step of 4 of 5. Overtime pay is not available to NG MTs (32 U.S.C. § 709 (h)). Reserve MTs may qualify for overtime pay.

Leave factors are not large cost drivers and not all leave is paid. Types of paid leave include annual leave, sick leave, and training-related military leave. Unpaid leave includes family and medical leave (including maternity and adoption leave), law enforcement leave (22 days for NG MTs), military leave (44 days for NG MTs), and other minor programs. An AGR accumulates 30 days leave per year plus all federal holidays.

b. Housing and Subsistence Allowances

Members of the military both in the AC and RC receive non-taxable allowances for housing and subsistence in addition to basic pay. Subsistence allowances are fixed for officers and enlisted, while housing allowances vary by grade, domestic factors (marital status), and location.

For Active Duty military, housing allowance factors are sourced from current and historical Service budget justification documents and DFAS. Reserve status military housing allowance factors are provided by DFAS. DFAS also provides factors for the basic allowance for subsistence (BAS).

⁵⁵ Some personnel may not participate in IDT or AT if on Active Duty, deployed, or otherwise unavailable. In such cases, the participation rate for both is reduced accordingly. Also, personnel, depending on career, may not participate in the full number of IDTs; however, the funds programmed for the IDTs may be used for other than IDT purposes.

⁵⁶ Step 5 of 10 is assumed as an average rate for GS civilians based on a cursory analysis of the average quantity of civilian federal service years; similar analysis was completed to identify step 4 of 5 for FWS system personnel.

c. Incentive, Special, Continuation, and Other Pays

For military personnel, skill- and career-based special and incentive pays are common. Bonuses for continuation and recruitment may also appear in these pays. Unlike allowances, special and incentive pays are taxable. Cost estimates in this paper use average costs by RC. Civilian personnel may qualify for certain bonuses and performance awards not included in basic pay, and budget justifications provide an estimate of these costs, on average, relative to basic pay under Object Class 11 (OC11).

2. Benefits and Other Direct Costs to the Department of Defense

a. Cost of Living and Other Allowances

Domestic (CONUS) cost of living allowances are small; however, they are taxable, unlike most military personnel allowances. Both domestic and overseas living allowances are location-dependent, but they do not represent a large cost. For both types of living allowance, this paper uses average costs by Service and RC developed from historical budget execution data.

b. Retirement Accrual Payments and Thrift Savings Plan

Retirement for military and civilian personnel is similar, with both systems employing accrual-based pensions and Thrift Savings Plans (TSPs). Both the military and civilian Federal Employees Retirement System (FERS) programs are primarily funded using accrual payments based on a percentage above pay. Personnel who hold both civilian and military positions are eligible for both systems. MTs are eligible for both as full-time civilians and as Reservists.⁵⁷ For civilians, the legacy CSRS and its associated unfunded liabilities are ignored, given the few remaining CSRS-covered employees.⁵⁸ Similarly, the military retirement system moved to an accrual-based system in the 1980s.

All cost estimates assume military personnel are compensated under the new Blended Retirement System (BRS). The system retains a smaller accrual-based pension, but shifts some compensation to 1 percent automatic and up to 4 percent matching TSP

⁵⁷ Eligibility for retirement is a function of age and service time. MTs may qualify for a special retirement benefit associated with a disability military separation. In such cases a discontinued service retirement (DSR) annuity may be available. This annuity is available for those over age 50 with 20 or more years of service and those of any age with 25 years of service. Depending on Social Security qualification, DSR retirees may also be eligible for a short-term retirement supplement.

⁵⁸ According to “Profile of Federal Civilian Non-Postal Employees,” from the OPM website, dated September 30, 2016, under heading “Job Characteristics” and sub-heading “Retirement Plan,” only 4.2 percent of federal non-postal jobs remain CSRS; however, for those currently eligible to retire, a greater portion are covered by CSRS.

contributions.⁵⁹ BRS also includes several factors that remain under review, such as a variable continuation pay bonus available in years 8–12 and a lump sum option. Active Duty with 12+ years of service and Reservists with 4,320+ retirement points are likely to remain in the current system. All new accessions will automatically enroll in BRS. Under either system, effect on cost is minor, and cost comparisons between the BRS and current accrual system completed separately do not show meaningful cost differences. Factors for the BRS and current accrual system are provided by the DoD Actuary and USD(P&R).

c. Subsistence-in-Kind

Military personnel receive in-kind benefits, including subsistence-in-kind. Subsistence-in-kind is primarily a benefit to Active Duty, enlisted Service members. TRs and traditional Guardsmen receive a small benefit associated with AT and IDT. Estimates of this cost are provided by DFAS.

d. Federal Insurance Contributions Act Payments

Federal Insurance Contributions Act payments are the employer-funded portion of costs associated with the Social Security Administration. Included are separate rates for Hospital Insurance of 1.45 percent of pay and Old-Age, Survivors, and Disability Insurance (OASDI) of 6.20 percent of pay. These rates are provided by the Social Security Administration.

e. Permanent Change of Station (PCS) and Other Travel

Estimates of PCS costs are generated from historical budget justification rates. PCS is primarily a cost for Active Duty.⁶⁰ Small relocation benefits exist for management-level civilians; however, such costs are not included.

f. Separation and Severance Pays

Separation pay applies primarily to Active Duty military; severance pay is primarily for civilian employees. Estimates for both are generated from historical rates in Service budget justifications. The military estimates are based on average historical costs and the civilian severance pays are covered in the Object Class 13 (OC13) cost factor.

⁵⁹ Current BRS plans do not begin matching contributions until two years of service.

⁶⁰ Although PCS costs are not a compensation benefit to the individual, they do reflect the cost of sustaining the career program associated with AC and AGR personnel and are a legitimate cost associated with such personnel.

g. Current Medical Care and Health Benefits

Current medical care is delivered primarily through the Defense Health Program (DHP) and involves an extensive range of benefits and programs. For Active Duty personnel, the “medical acceleration factor” reported annually by the OSD Comptroller (OSD(C)) is used as the current medical cost factor. Active Duty benefits include multiple TRICARE medical options and TRICARE/Active Duty Dental Program and vision coverage.

Part-time military personnel not employed as civilians, AGRs, or otherwise on Active Duty qualify for TRICARE Reserve Select (TRS) medical and the TRICARE Dental Program (TDP). As of FY 2016, approximately 25 percent of eligible SELRES members are enrolled in TRS. An effective “medical acceleration factor” for members of the SELRES is derived based on the cost of annual premiums for TRS and TDP and the associated percentage of the cost of coverage required to be covered by members according to statute.

Generally, no military current healthcare options are available for personnel (MTs and civilians) eligible for FEHBP (Federal Employees Health Benefits Program) and FEDVIP (Federal Employees Dental and Vision Insurance Program). The cost of civilian health benefits are included in Object Class 12 (OC12) rates developed from historical Service budget justifications. As with all programs, individual benefits vary; however, those variations are not relevant for cost purposes.⁶¹

h. Other Personnel Benefits and Costs

The primary benefits included in this section are retiree medical. The Medicare-Eligible Retiree Health Care Fund (MERHCF) funds healthcare for military retirees (Active Duty and part-time) greater than 65 years old, using an accrual factor. The factor is provided annually by OSD(C). For retiree healthcare at ages less than 65, or Non-Medicare-Eligible Retiree Health Care (NMERHC), there is no existing accrual factor; however, medical care is still available, primarily for Active Duty retirees. A 2013 CBO report provided an estimate of the cost of an accrual fund for Active Duty; an effective accrual cost is included as part of the reported program cost. Retired Reservists may be able to purchase TRICARE Retired Reserve (TRR) and the TRICARE Retiree Dental Program (TRDP) while under 60, but neither program is subsidized.⁶²

For civilians, retiree healthcare is partially covered in the OC12 rate developed from budget information; however, additional funding is provided by external agencies. Other

⁶¹ Small differences in benefits include, for example, differences in co-pays between programs, such as the more generous co-pay benefits for AGRs using TRICARE relative to MTs using FEHBP.

⁶² For Reserve retirees between 60 and 65, a modified CBO factor is used in cases where applicable.

benefits rolled into average costs include other military personnel costs, some of which are displayed in Table 8.

Table 8. Selected Other Benefits, Entitlements, and Costs

Description	AGR	MT	CIV	AC
Workers' Compensation	VA	Annuity	Annuity	VA
Life Insurance	SGLI	FEGLI/SGLI	FEGLI	SGLI
Long-term Care Insurance	VA	VA	FLTCIP	VA
Disability Insurance	VA	VA/FECA	FECA	VA
VA Disability	Yes	Yes	No	Yes
Death Benefit	Yes	Yes	No	Yes

Note: SGLI – Servicemembers Group Life Insurance; FEGLI – Federal Employees Group Life Insurance; FECA – Federal Employees' Compensation Act; FLTCIP – Federal Long Term Care Insurance Program.

3. Other Indirect Costs to the Department of Defense

Other indirect costs primarily cover non-labor costs not variable in the short run. For military personnel, specific factors covering installation support, personnel benefits, general training and education, and personnel administration are included in the fully-burdened cost estimates. Military indirect cost factors were derived from historical costs as reported over a three-year period of the Five-Year Defense Plan (FYDP) by RC. Civilian indirect cost factors are estimated at 12 percent of short-run labor costs based on guidance in DoDI 7041.04 for instances where there are limited data. The factor is modified for RC-specific indirect cost tendencies.

In some manpower cost analyses, it may be appropriate to exclude long-run indirect costs due to certain assumptions: shorter analytical timeframes, equality of costs across personnel types, or desire to exclude costs with inherently high levels of uncertainty. Indirect costs are identified separately in the individual cost estimates to allow readers to modify results to support alternative analyses; however, they are included in the fully-burdened results of this paper.

Skill training cost differences are not included in the cost analyses in this paper. Magnitude is typically dependent on professional area: pilots, for example, generate large costs for initial skill training—larger than most personnel. For civilians, training may occur in a military program for military-specific requirements and cost similar to military personnel. For example, a civilian plumber may be expected to be hired with the needed skill, whereas a maintainer of military radars might attend a military training program.

4. Other Costs to the Federal Government

a. Department of Veterans Affairs (VA)

The VA annual budget exceeds \$180 billion in FY 2017, and more than \$100 billion of that budget is mandatory spending. A CBO report provides estimates for Active Duty personnel in three major categories of cost: VA healthcare, VA disability, and pension and other VA benefits.⁶³ The CBO reports an effective accrual cost for these benefits, and those costs are used as an Active Duty baseline source for this paper. They are modified for use by the characteristics of each Service and part-time SELRES personnel.

CBO estimates that for Active personnel, the annual accrual cost per Active Duty member is \$16,000 per year. For VA health benefits, it is \$15,000. Other VA costs are estimated at \$3,000 per person per year.⁶⁴

We estimated the disability-related cost for Reservists by comparing the average disability benefit of personnel deployed in support of operations in Iraq and Afghanistan. The average compensation to Active recipients was \$9,200, 9.8 percent more than the average payment to Reserve recipients. We used this differential to modify the \$16,000 accrual factor. We also adjusted for inter-Service differences. Average Army compensation levels were 23 percent higher than those for the Air Force. Our estimates of RC disability costs are likely high, since they do not adjust for possible differences in the percent of veterans receiving disability benefits, perhaps a major factor.

RC eligibility for VA health benefits depends on activation. Members of the Reserves or NG who were called to Active Duty by a federal order, and completed the full period for which they were called or ordered to Active Duty, may be eligible for VA health benefits. All Reservists who are combat veterans are eligible for VA healthcare. Receipt of benefits also depends on priority group, based largely on combat-related disability status and income level. We estimated eligibility by examining data on the probability of activation during time in the RC, analyzing cohorts that joined the RC after 2001. We found that the probability of ever deploying varies by Component, averaging around 40 percent.

RC members largely qualify for other VA benefits, such as home loans, life insurance, and the Montgomery GI Bill. We assumed their costs for these benefits are equal to those of Active Duty veterans.

⁶³ CBO, “Replacing Military Personnel in Support Positions with Civilian Employees,” December 2015, 39, https://www.cbo.gov/sites/default/files/114th-congress-2015-2016/reports/51012-Military_Civilian_Mix_1.pdf.

⁶⁴ The Full Cost of Manpower (FCoM) model attributes a total VA cost per Active Duty year of only \$7900. This is based on dividing the VA budget by the number of veterans and cannot be expected to approximate the annual accrual cost we are interested in.

b. Department of the Treasury

The MERHCF accrues funding for healthcare provided to retirees once they reach 65 years of age. Concurrent receipt operates as an accrual fund like retired pay; however, the payments are made directly by the Treasury Department. The Department of the Treasury provides an estimate of this cost.

c. Department of Education

Average payments covering primarily “impact aid” for communities accepting students of federal employees. An estimate of this cost is provided from the FCoM model developed by OSD(CAPE) following DoDI 7041.04. This cost is small and can be safely ignored, but is included for completeness under DoDI 7041.04.

d. Office of Personnel Management (OPM)

A portion of civilian retiree healthcare is covered by payments made by DoD; however, additional payments are made directly by OPM. OPM provides an estimate of this cost per federal employee on an annual basis, which is used for this paper.

e. Department of Labor

Department of Labor costs are small and can be safely ignored; however, they are included for completeness under DoDI 7041.04. A factor is used from the FCoM tool.

5. Revenue to the Federal Government

The model assumes a certain amount of cash compensation returns to the government from income and other tax revenue. Tax revenue is significantly lower for military personnel because of the high percentage of cash compensation that is not taxable. This factor provides a real increase to the effective incomes of military personnel.

B. Average Annual Individual Cost Estimates

Average cost estimates are reported for both the effective DoD program cost and the fully-burdened cost for individuals of each category of FTS. Fully-burdened costs include elements of long-run cost within DoD and costs accrued to other federal departments, offices, and agencies. Estimates of both costs are reported for each Component: USAR in Table 9, ARNG in Table 10, USAFR in Table 11, and ANG in Table 12.

Costs are reported in FY 2017 dollars. Estimates for each Component reflect the cost of the same population, a population that incorporates all current FTS personnel (AGRs, MTs, NDSTs and civilians). For example, the USAR AGR estimate comprises the average cost of a USAR AGR if all current USAR AGRs, MTs, and civilians are employed as AGRs. Three different categories of FTS are compared:

- Active Guard and Reserve (AGR)
- Military Technician (MT)
- Civilian + Training Reservist⁶⁵ (CIV + TR) (includes training Guardsmen)

⁶⁵ The CIV + TR cost estimate is the combined, long-run cost of positions that convert to civilian where there are no associated force structure changes or end strength reductions. The full-time and part-time positions are delinked but remain otherwise as before the change. The scope of this paper does not cover the effects of such transitions; however, the cost differences between an MT and CIV + TR are not substantial. Differences in this paper result primarily from small changes in benefits qualifications including overtime and healthcare. Additional research would be needed to confirm any significant differences in the long run.

Table 9. USAR Average Annual Individual Cost Estimate

Category	AGR	MT		CIV + TR	
	Military	Military	Civilian	Military	Civilian
Cost to the Department of Defense (Program)					
Basic Pay & Salary	58,361	10,654	58,323	10,654	58,323
Housing & Subsistence Allowances	25,214	995	0	995	0
Incentive, Special, & Other Pays	3,771	609	3,614	609	3,614
<i>Cash Compensation</i>	<i>87,345</i>	<i>12,258</i>	<i>61,937</i>	<i>12,258</i>	<i>61,937</i>
Cost of Living & Other Allowances	1,975	360		360	
Retirement Accrual & Thrift Savings	16,635	2,450		2,450	
Subsistence-in-Kind	1,209	80		80	
Federal Insurance Contributions Act	4,460	815	19,217	815	19,217
PCS & Other Travel	3,588	633		633	
Medical Care & Health Benefits	10,957	0		1,123	
Other Personnel Benefits & Costs	9,089	4,174		4,174	
Specific Training (optional)	0	0	0	0	0
Separation & Severance Pays	0	0	2,100	0	2,100
<i>Benefits & Other Direct Costs</i>	<i>47,912</i>	<i>8,512</i>	<i>21,317</i>	<i>9,635</i>	<i>21,317</i>
Total	135,257		104,023		105,146
Cost to the Department of Defense (Other)					
Installation Support	9,310	1,676		1,676	
Personnel Administration	2,693	485	8,428	485	8,428
Personnel Benefits	1,851	496	0	120	0
General Training & Education	4,804	865	441	865	441
Total	18,658		12,391		12,015
Cost to the Federal Government					
Department of Veterans Affairs	35,494	27,859	0	27,859	0
Department of the Treasury	4,732	852	0	852	0
Department of Education	365	0	101	0	101
Office of Personnel Management	0	0	6,263	0	6,263
Department of Labor	0	0	24	0	24
Total	40,591		35,100		35,100
Cost to the Federal Government	194,506		151,514		152,261
Revenue to the Federal Government	(7,146)		(9,015)		(7,335)
Cost to the Federal Government (Fully-burdened)	187,360		142,499		144,926

Note: Long-run average cost estimate of demographically equivalent personnel. Small differences are not considered meaningful. Reductions in RC strength with a civilian conversion would eliminate TR costs.

Table 10. ARNG Average Annual Individual Cost Estimate

Category	AGR	MT		CIV + TR	
	Military	Military	Civilian	Military	Civilian
Cost to the Department of Defense (Program)					
Basic Pay & Salary	56,606	10,344	62,804	10,344	62,804
Housing & Subsistence Allowances	24,715	975	0	975	0
Incentive, Special, & Other Pays	3,733	592	2,714	592	4,535
<i>Cash Compensation</i>	<i>85,054</i>	<i>11,911</i>	<i>65,518</i>	<i>11,911</i>	<i>67,339</i>
Cost of Living & Other Allowances	1,930	352		352	
Retirement Accrual & Thrift Savings	16,077	2,368		2,368	
Subsistence-in-Kind	1,226	81		81	
Federal Insurance Contributions Act	4,326	791	20,867	791	20,867
PCS & Other Travel	1,735	204		204	
Medical Care & Health Benefits	10,957	0		1,123	
Other Personnel Benefits & Costs	9,012	4,227		4,227	
Specific Training (optional)	0	0	0	0	0
Separation & Severance Pays	0	0	2,545	0	2,545
<i>Benefits & Other Direct Costs</i>	<i>45,263</i>	<i>8,023</i>	<i>23,412</i>	<i>9,146</i>	<i>23,412</i>
Total	130,317		108,863		111,808
Cost to the Department of Defense (Other)					
Installation Support	9,578	1,724		1,724	
Personnel Administration	4,329	779	8,838	779	9,018
Personnel Benefits	1,806	488	0	112	0
General Training & Education	3,453	621	441	621	431
Total	19,165		12,891		12,685
Cost to the Federal Government					
Department of Veterans Affairs	35,494	27,728	0	27,728	0
Department of the Treasury	4,732	852	0	852	0
Department of Education	365	0	101	0	101
Office of Personnel Management	0	0	6,263	0	6,263
Department of Labor	0	0	24	0	24
Total	40,591		34,968		34,968
Cost to the Federal Government	190,072		156,723		159,461
Revenue to the Federal Government	(6,796)		(9,527)		(8,217)
Cost to the Federal Government (Fully-burdened)	183,277		147,196		151,244

Note: Long-run average cost estimate of demographically equivalent personnel. Small differences are not considered meaningful. Reductions in RC strength with a civilian conversion would eliminate TR costs.

Table 11. USAFR Average Annual Individual Cost Estimate

Category	AGR	MT		CIV + TR	
	Military	Military	Civilian	Military	Civilian
Cost to the Department of Defense (Program)					
Basic Pay & Salary	57,156	10,382	69,888	10,382	69,888
Housing & Subsistence Allowances	25,703	1,036	0	1,036	0
Incentive, Special, & Other Pays	4,380	681	4,311	681	4,311
<i>Cash Compensation</i>	<i>87,239</i>	<i>12,099</i>	<i>74,199</i>	<i>12,099</i>	<i>74,199</i>
Cost of Living & Other Allowances	1,074	299		299	
Retirement Accrual & Thrift Savings	16,356	2,400		2,400	
Subsistence-in-Kind	1,277	84		84	
Federal Insurance Contributions Act	4,371	794	24,479	794	24,479
PCS & Other Travel	2,098	1,461		1,461	
Medical Care & Health Benefits	10,957	0		1,123	
Other Personnel Benefits & Costs	9,060	4,246		4,246	
Specific Training (optional)	0	0	0	0	0
Separation & Severance Pays	0	0	1,043	0	1,043
<i>Benefits & Other Direct Costs</i>	<i>45,194</i>	<i>9,285</i>	<i>25,523</i>	<i>10,408</i>	<i>25,523</i>
Total	132,433		121,106		122,229
Cost to the Department of Defense (Other)					
Installation Support	19,103	3,439	16,483	3,439	16,483
Personnel Administration	4,379	788		788	
Personnel Benefits	2,106	508	0	132	0
General Training & Education	4,239	763	535	763	535
Total	29,827		22,516		22,140
Cost to the Federal Government					
Department of Veterans Affairs	32,237	27,351	0	27,351	0
Department of the Treasury	4,732	852	0	852	0
Department of Education	365	0	101	0	101
Office of Personnel Management	0	0	6,263	0	6,263
Department of Labor	0	0	24	0	24
Total	37,334		34,592		34,592
Cost to the Federal Government	199,594		178,214		178,961
Revenue to the Federal Government	(6,829)		(11,459)		(9,427)
Cost to the Federal Government (Fully-burdened)	192,765		166,755		169,534

Note: Long-run average cost estimate of demographically equivalent personnel. Small differences are not considered meaningful. Reductions in RC strength with a civilian conversion would eliminate TR costs.

Table 12. ANG Average Annual Individual Cost Estimate

Category	AGR	MT		CIV + TR	
	Military	Military	Civilian	Military	Civilian
Cost to the Department of Defense (Program)					
Basic Pay & Salary	54,180	9,842	66,474	9,842	66,474
Housing & Subsistence Allowances	24,568	995	0	995	0
Incentive, Special, & Other Pays	3,782	605	3,048	605	4,881
<i>Cash Compensation</i>	<i>82,530</i>	<i>11,441</i>	<i>69,521</i>	<i>11,441</i>	<i>71,355</i>
Cost of Living & Other Allowances	1,074	293		293	
Retirement Accrual & Thrift Savings	15,487	2,272		2,272	
Subsistence-in-Kind	1,357	90		90	
Federal Insurance Contributions Act	4,143	753	23,479	753	23,479
PCS & Other Travel	369	779		779	
Medical Care & Health Benefits	10,957	0		1,123	
Other Personnel Benefits & Costs	9,237	4,241		4,241	
Specific Training (optional)	0	0	0	0	0
Separation & Severance Pays	0	0	1,347	0	1,347
<i>Benefits & Other Direct Costs</i>	<i>42,625</i>	<i>8,428</i>	<i>24,826</i>	<i>9,551</i>	<i>24,826</i>
Total	125,156		114,217		117,174
Cost to the Department of Defense (Other)					
Installation Support	22,451	4,041		4,041	
Personnel Administration	1,682	303	17,636	303	17,978
Personnel Benefits	1,877	467	0	91	0
General Training & Education	9,078	1,634	535	1,634	522
Total	35,088		24,616		24,570
Cost to the Federal Government					
Department of Veterans Affairs	32,237	27,113	0	27,113	0
Department of the Treasury	4,732	852	0	852	0
Department of Education	365	0	101	0	101
Office of Personnel Management	0	0	6,263	0	6,263
Department of Labor	0	0	24	0	24
Total	37,334		34,354		34,354
Cost to the Federal Government	197,578		173,187		176,097
Revenue to the Federal Government	(6,179)		(10,171)		(8,769)
Cost to the Federal Government (Fully-burdened)	191,400		163,015		167,328

Note: Long-run average cost estimate of demographically equivalent personnel. Small differences are not considered meaningful. Reductions in RC strength with a civilian conversion would eliminate TR costs.

C. Workforce Average Annual Cost Estimates

The cost estimating tool can be used to estimate not only the cost of a single individual, but also the total cost of all personnel in a workforce. Average annual workforce cost estimates are reported in this paper for both the effective DoD program cost and the fully-burdened cost. To derive appropriate workforce alternatives, the working group first identified mixes of FTS it believed to be feasible:

- 100 percent AGRs;
- AGRs and civilians;
- AGRs, MTs, and civilians (status quo without NDSTs); and
- AGRs and MTs.

To calculate cost estimates for a workforce based on any of the feasible mixes of FTS, personnel quantities, reflecting “ratios” of FTS, needed to be added. Fully specified workforce alternatives developed from the set of feasible mixes, reporting requirements in the FY 2017 NDAA, and input from the working group appear below. Alternatives were finalized to include only the four following options:

- A. Current Workforce Alternative:** Retention of the current mix of AGRs, MTs, and civilians, including the planned conversion of all current NDSTs to civilians.
- B. AGR/CIV Workforce Alternative:** Conversion of all current FTS (AGRs, MTs, NDSTs and civilians) into a mix of 80 percent AGRs and 20 percent civilians. Under this option, the MT and NDST programs are both eliminated, and all RCs would use the same mix of AGRs and civilians.
- C. NDAA Workforce Alternative:** Conversion, derived from the FY 2017 NDAA reporting requirement, of all current MTs to 80 percent AGRs and 20 percent civilians. Under this option, all current AGRs and civilians would remain, and all NDSTs would convert to civilians. Although this alternative eliminates the MT program, variations on this alternative could preserve the MT program for certain classes of personnel, career fields, etc.
- D. Preferred Workforce Alternative:** Modification, developed by the working group and its SMEs, of the current mix of FTS (AGRs, MTs and civilians) adapted to the specific needs and requirements of each RC. Under this scenario, MTs would remain in the workforce mix and all current NDSTs would convert to civilians.

The workforce cost estimates in Table 13 through Table 16 assume 100 percent of authorizations (annual authorizations may not always correspond to requirements) are

filled, and that filled positions are fully resourced. It is reasonable to assume the reported cost estimates are high relative to actual annual requirements. For example, if an RC chooses to fill 90 percent of its authorizations in a given FY, the actual annual requirement for funding would be approximately 90 percent of the annual authorization-based workforce cost estimates.

Non-recurring transition costs are not included in the workforce mix cost estimates, given preferred conversion timelines and general implementation uncertainty. However, some minor suggestions were offered during the working group collaborations regarding potential transition savings. A shift to AGR and elimination of the MT program would, for example, support reductions in certain civilian personnel management and oversight functions (such as in litigation and settlement administration). However, an increase in tasking in offices responsible for managing AGR programs might offset some savings related to elimination of the MT program.

Table 13 displays average annual program and fully-burdened cost estimates for the USAR in FY 2017 dollars. The differences in program cost range from 0 percent to 5 percent and the differences in fully-burdened cost range from 0 percent to 6 percent.

Table 13. USAR Workforce Alternative Manpower and Average Annual Cost

FTS Category	A. Current	B. AGR/CIV	C. NDAA	D. Preferred
AGR	16,261	21,867	22,317	16,261
MT	7,570	0	0	7,512
NDST	420	0	0	0
CIV	3,083	5,467	5,017	3,561
Total FTS	27,334	27,334	27,334	27,334
Program Cost (\$M)	\$3,330	\$3,486	\$3,497	\$3,338
		+4% \$156	+5% \$167	+0% \$9
Fully-Burdened Cost (\$M)	\$4,491	\$4,729	\$4,760	\$4,513
		+5% \$239	+6% \$269	+0% \$22

Table 14 displays average annual program and fully-burdened cost estimates for the ARNG in FY 2017 dollars. The differences in program cost range from 2 percent to 6 percent and the differences in fully-burdened cost range from 3 percent to 8 percent.

Table 14. ARNG Workforce Alternative Manpower and Average Annual Cost

FTS Category	A. Current	B. AGR/CIV	C. NDAA	D. Preferred
AGR	30,155	46,626	50,561	39,802
MT	25,507	0	0	16,330
NDST	1,600	0	0	0
CIV	1,021	11,657	7,722	2,151
Total FTS	58,283	58,283	58,283	58,283
Program Cost (\$M)	\$7,054	\$7,396	\$7,452	\$7,225
		+5% \$342	+6% \$398	+2% \$171
Fully-Burdened Cost (\$M)	\$9,637	\$10,288	\$10,399	\$9,968
		+7% \$651	+8% \$762	+3% \$331

Table 15 displays average annual program and fully-burdened cost estimates for the USAFR in FY 2017 dollars. The differences in program cost range from 0 percent to 4 percent and the differences in fully-burdened cost range from 0 percent to 9 percent.

Table 15. USAFR Workforce Alternative Manpower and Average Annual Cost

FTS Category	A. Current	B. AGR/CIV	C. NDAA	D. Preferred
AGR	2,955	13,427	11,004	3,588
MT	10,061	0	0	9,112
NDST	90	0	0	0
CIV	3,768	3,357	5,780	4,084
Total FTS	16,874	16,784	16,784	16,784
Program Cost (\$M)	\$2,024	\$2,103	\$2,085	\$2,021
		+4% \$79	+3% \$61	-0% -\$3
Fully-Burdened Cost (\$M)	\$2,712	\$2,947	\$2,896	\$2,717
		+9% \$235	+7% \$184	+0% \$6

Table 16 displays average annual program and fully-burdened cost estimates for the ANG in FY 2017 dollars. The differences in program cost range from 2 percent to 3 percent and the differences in fully-burdened cost range from 4 percent to 7 percent.

Table 16. ANG Workforce Alternative Manpower and Average Annual Cost

FTS Category	A. Current	B. AGR/CIV		C. NDAA		D. Preferred	
AGR	14,764	30,824		32,446		25,045	
MT	22,103	0		0		8,862	
NDST	350	0		0		0	
CIV	1,313	7,706		6,084		4,623	
Total FTS	38,530	38,530		38,530		38,530	
Program Cost (\$M)	\$4,629	\$4,778		\$4,785		\$4,724	
		+3%	\$149	+3%	\$156	+2%	\$95
Fully-Burdened Cost (\$M)	\$6,700	\$7,156		\$7,190		\$6,995	
		+7%	\$456	+7%	\$490	+4%	\$295

Both the USAR and USAFR preferred workforce alternative cost estimates are insignificantly different relative to the current workforce. The ANG preferred workforce incorporates a large shift in its workforce, decreasing MTs and increasing AGRs by approximately 70 percent. This shift effects a 2 percent to 4 percent increase in the cost of a fully resourced FTS program. Similarly, the ARNG has offered a preferred mix that increases its AGRs by nearly 10,000 personnel, with a corresponding decrease in MTs. This shift increases costs of a fully resourced FTS program by 2 percent to 3 percent. The small cost increases estimated for both RCs do not represent a significant change in either program or fully-burdened costs.

For both the “AGR/CIV” and “NDAA” workforce alternatives, cost increases are more substantial, as 100 percent of MTs are eliminated and converted to primarily AGRs with a much smaller quantity converted to civilians.

6. Summary of Findings

- Both DoD program cost and fully-burdened cost estimates for demographically equivalent populations indicate equivalent or higher costs for all cases where AGRs replace MTs on a 1:1 basis. Fully-burdened costs are less certain than program costs but also show consistently higher costs for AGRs relative to MTs.
- Conversions assume a 1:1 replacement ratio; however, recent studies indicate this assumption may not always be appropriate. With increasing use of technology and computer-assisted processes, some support and administrative FTS positions might be assessable for reduction.
- Guidance for estimating the program and fully-burdened cost of Active Duty military, civilians, and contractors should be expanded to cover categories of FTS, Traditional Reservists and Guardsmen. OSD or the Service Departments should release annualized program rates for all types of RC manpower.⁶⁶
- RCs manage and administer FTS programs differently, and common approaches to FTS reform are unlikely to be as successful as adapted solutions. DoD management approaches should be flexible and allow each RC to select an appropriate workforce using relevant DoDI and DoDD guidance.
- MT-to-AGR conversions would best be targeted to attributes such as career field, location (market conditions), age, and full-time responsibility. Factors for consideration suggested through discussion included—for full-time positions—high-stress, high-activity, and skill competitive.
- No serious readiness effects were highlighted during working group sessions other than regarding potential decreases in fill from a rapid transition. Separate concerns over state access to AGRs and civilians for certain state missions were expressed by RC representatives.
- Retirement of the MT program, if pursued, should be planned and executed to maintain stability and limit disruptions to readiness. A preferred conversion program would prioritize attrition replacements and voluntary conversions and occur over a period of 10–15 years.

⁶⁶ DoDI 7041.04 is appropriate guidance for cost comparisons of full-time AC, civilian, and contractor manpower. The OSD(CAPE) FCoM manpower cost estimation model should be expanded to include additional types of manpower.

- Data collection and data management is essential to understanding how FTS is, and may be, used. The most challenging task encountered for this paper was accessing relevant data. Accurate and validated information on FTS must be available and should reflect a common taxonomy and reporting structure.
- DoD occupation codes, currently out-of-date but used in personnel data systems, describe civilian and military functions using a unified taxonomy. Updated DoD occupation codes might clarify professional data for decision makers. OPM civilian occupation classifications accommodate some MT functions but may not accurately describe how an FTS position supports a military unit.⁶⁷
- Arbitrary limits, such as for personnel authorizations or appropriations, on one or some areas of FTS, may unnecessarily restrict management ability to use, balance, and cross-level FTS where needed.⁶⁸ Alternative approaches such as a single FTS authorization across categories may increase RC efficiency.
- Simplifying appropriation structures for manpower would support a unified approach to workforce mix by linking total financial resources to all categories of FTS personnel. Potential for reduction and consolidation of pay and personnel systems is a secondary benefit, and risk, associated with such a reform.
- Standard practices should be confirmed and communicated, or established if they do not exist, to plan for, validate, program, and justify FTS programs and support the requirement “to successfully execute Defense missions at a low to moderate level of risk.” (DoDI 1100.22)

⁶⁷ Example OPM occupation code professional areas, including 00 miscellaneous occupations, 52 miscellaneous occupations, and 35 general services and support occupations, do not necessarily provide the military-specific fidelity needed to properly discern occupational responsibilities.

⁶⁸ For example, as positions convert to civilian from MT, efforts continue to reduce civilians and contractors, which may create new pressure on the converted civilian positions. See Government Accountability Office, “DoD Civilian and Contractor Workforces,” GAO-17-128, October 2016.

Appendix A. Reference Tables

Table A-1. Reports Related to Full-Time Support

Date	Report	Description
1974 Apr	Defense Manpower Commission	Congress creates commission to target cost savings in manpower
1976 Apr	Report to Congress	Defense Manpower Commission published report
1978 Jun	ASD M&RA report	Full time training and administration of the Selected Reserve
1978 Dec	RAND report for DARPA	Defense Manpower Policy
1979 Feb	GAO report FPCD-79-18	Army RC MT program issues
1982 Sep	GAO report FPCD-82-57	MT conversions to AGRs
1983 Jun	GAO report 121561	FTS programs in the Army and Air Force RCs
1985 Jun	GAO report NSIAD-85-95	Problems Implementing the Army's RC FTM program
1990 Feb	GAO report NSIAD-90-43	Opportunities to improve management of the FTS program
1991 Dec	GAO report NSIAD-92-70	Accurate and complete data needed to monitor FTS program
1991 Dec	RAND report R-4034-RA	Manning FT positions in support of the Selected Reserve
1995 Feb	DoDIG report 95-099	FTS staffing for Selected Reserve forces
1995 Dec	RAND report	Assessing the State and Federal Missions of the NG
2001 May	GAO-01-485	Projected requirements for some Army forces not well established
2006 Jan	CRS report to Congress	RC Personnel Issues
2008 Jan	CNGR report to Congress	CNGR publishes final report to Congress with recommendations
2013 Jan	RFPB report	Fully-burdened & life-cycle costs of military personnel
2013 Sep	CNA report to Congress	Termination of MT as a distinct personnel management category

Date	Report	Description
2013 Sep	GAO-13-792	Opportunities exist to improve cost estimates of the DoD workforce
2013 Nov	GAO-14-71	Actions needed to ensure RC HQ are sized and efficient
2014 Jan	NC on the Structure of the USAF	Final report on the structure of the Air Force
2014 Feb	RFPB report	RC use, balance, cost and savings
2014 Oct	DBB Report to SECDEF	Implementing best practices for major business processes in DoD
2015 Aug	RAND report RAN 136452	AC responsibility in RC pre- and post-mobilization training
2015 Dec	CBO Report	Replacing military in support positions with civilians
2016 Jan	NCFA report to Congress	Final report from the commission
2016 Apr	GAO-16-327	Risk assessment needed for changes to Army's force structure
2016 Aug	GAO-16-538	Air Force assesses requirements to size HQ for RC
2016 Sep	GAO-16-841	Readiness rebuilding may be at risk w/o a comprehensive plan
2016 Oct	GAO-17-128	DoD Civilian and Contractor Workforces

Table A-2. Title 5 United States Code Government Organization and Employees

Status	Law	Description
1943 Oct	5 U.S.C. § 310	Authority to Employ Civilians in DoD
	5 U.S.C. § 2102	The competitive service: NDSTs are in this category
	5 U.S.C. § 2103	The excepted service: all NG MTs are in this category
	5 U.S.C. § 2105	Employee defined
2016 Dec	5 U.S.C. § 3101	"General authority to employ."
	5 U.S.C. § 3330d(c)	No time limit on spouses of members of the Armed Forces who are employed as DoD civilians, relocation from PCS and job appointment of the spouse
2016 Dec	5 U.S.C. § 51XX.	"Classification." (position attributes)
	5 U.S.C. § 5101	Civilian classification of positions
	5 U.S.C. Chapter 13 §§ 201–226	Insurrection

Table A-3. Title 10 United States Code Armed Forces

Status	Law	Description
	10 U.S.C. Subtitle E	In general: Reserve Components
2016 Dec	10 U.S.C. § 13	“The Militia.” (part a, NG, part b, not recognized volunteer state militia)
	10 U.S.C. § 101	Organization and general military powers; definitions: authorized strength, RCs, duty status
	10 U.S.C. § 115	Personnel strengths: requirement for annual authorizations. Anyone 1095 day or more will be included into the strength levels for RC AGRs. Strength levels of MT defined as ceiling. Ability for SECDEF to exceed strength by 3% or 2%.
	10 U.S.C. § 115a	Annual defense manpower requirements report: military or civilian FTEs assigned to major DoD HQ activities, report on Army and Air Force MTs.
	10 U.S.C. § 117	Readiness Reporting System
	10 U.S.C. § 118	Defense Strategy Review: define force size, structure, capabilities with risk
	10 U.S.C. § 129	Prohibition on certain civilian personnel management constraints. Not subject to limitation in terms of man-years, end strength, FTEs, maximum employees.
	10 U.S.C. § 129a	General policy for total force management. SECDEF establish policy for determining the most appropriate and cost efficient mix of personnel
	10 U.S.C. § 523	Authorized strengths: Control grades AC (officer)
	10 U.S.C. § 527	POTUS authority to suspend § 523,525, and 526 with respect to control grades in time or war or national emergency
	10 U.S.C. § 976	Membership in military unions, organizing of military unions, and recognition of military unions prohibited
	10 U.S.C. § 1021	Created membership as a condition of employment for the reserve MT
	10 U.S.C. § 1580	Emergency essential employees: designation
	10 U.S.C. § 2330a	Procurement of services and tracking of purchases; data collection system
	10 U.S.C. § 2461	Public-private competition required before conversion to contractor.
	10 U.S.C. § 2463	Guidelines and procedures for use of civilian employees to perform DoD functions
	10 U.S.C. § 10105	ARNG: composition, limitation on AC assigned to Army RCs
	10 U.S.C. § 10213	Reserve Components: dual membership prohibitions

Status	Law	Description
2016 Dec	10 U.S.C. § 10216 (b) (3)	MT description; exempt from requirement for reductions in DoD civilian personnel, only reduced with force structure.
Revision	10 U.S.C. § 10216 (g)	Retention of military who lose dual status due to a combat related disability
Of Note	10 U.S.C. § 10217(e)	NDST: phased in termination of positions through attrition
	10 U.S.C. § 10218	Army and AF technicians: conditions for retention, mandatory retirement under civil service laws both MT and NDST
Revision	10 U.S.C. § 12011	Authorized strengths: Control Grades for RC officers (O4, O5, O6) on active duty or AGR
Revision	10 U.S.C. § 12012	Authorized strengths: Control Grades for RC senior enlisted (E8,E9) on active duty or AGR
	10 U.S.C. § 12301	Reserve Components generally: active duty during war or emergency
	10 U.S.C. § 12310	Performing AGR duty to include additional duties

Table A-4. Title 32 United States Code National Guard

Status	Law	Description
	32 U.S.C. § 113	Federal financial assistance for support of additional duties for the ARNG
	32 U.S.C. § 314	Adjutants General
	32 U.S.C. § 315	Detail of AC Army and AF to duty with the NG
2016 Dec	32 U.S.C. § 325	“Relief from National Guard duty when ordered to active duty.”
2016 Dec	32 U.S.C. § 328	Active Guard and Reserve duty and Governor’s authority
2016 Dec	32 U.S.C. §§ 502, 508, 509	“Chapter 5: Training.”
	32 U.S.C. § 502	Required drills and field exercises
	32 U.S.C. § 508	Assistance for certain youth and charitable organizations
	32 U.S.C. § 509	NG Youth Challenge Program
	32 U.S.C. § 708	Property and Fiscal officers (USPFO) (selected by governor and approved by Air / Army Guard and Chief of NG; 10 and 32 U.S.C. authority; guardsman in 10 U.S.C. status, intermediary between states and feds) (mix state by state)
1968 Oct	32 U.S.C. § 709	NG Technician Act; “Technicians: employment, use, status.”
	32 U.S.C. § 709(g)	§s 2108,3502,7511, and 7512 of 5 U.S.C. do not apply to a person employed under this §
	32 U.S.C. § 904	Homeland Defense duty
	32 U.S.C. § 906	Requests for funding assistance

Table A-5. Other United States Code and Law Related to Full-time Support

Status	Law	Description
	18 U.S.C.	In general: Crimes and Criminal Procedure
	18 U.S.C. § 1385	Use of Army and Air Force as posse comitatus
	37 U.S.C.	In general: Pay and Allowances of the Uniformed Services
	38 U.S.C. Chapter 43	Veteran benefits and employment and reemployment rights (USERRA)
	42 U.S.C.	In general: The Public Health and Welfare
	42 U.S.C. § 4701	Intergovernmental Personnel Program
	49 U.S.C.	In general: Transportation
	50 U.S.C.	In general: War and National Defense
	50 U.S.C. § 1431	Authorize any department of agency... to enter contracts or modifications of contracts
1992 Oct	1993 NDAA	ARNG combat reform initiative, Title XI
2004 Oct	2005 NDAA	Establishes the Commission on the NG and Reserves
2011 Oct	2012 NDAA	Section 519 requested a report on the termination of MT
2015 Oct	2016 NDAA § 1053	Conversion of MT, no fewer than 20% and termination of the NDST
2016 Dec	2017 NDAA § 1084, § 932, § 604, § 512, § 515, § 1101 & 1102	Conversion of certain MT NLT 20% by 1 Oct 17, conversion of all NDST by 1 Oct 17, report on the feasibility and advisability on converting the remaining MT to AGRs. Expanded appellate rights for MT (MSPB & EEOC)

Table A-6. Policy and Regulation Related to Full-time Support

Date	Policy/Regulation	Description
1990 Jun	AR 135-2	FTS program
1990 Oct	MCO 12335.1	Merit staffing program
1994 Sep	AR 140-30	Active Duty in support of USAR and AGR
1997 Sep	AR 611-1	Military classification structure
2003 May	OMB A-76	Performance of commercial activities; federal policy related to competition
2003 Dec	AR 135-18	AGR program
2005 Feb	DoDD 1100.4	Guidance for Manpower Management
2006 Feb	AR 570-4	Manpower Management
2007 Jan	DA PAM 611-21	Military occupational classification
2008 Oct	DoDD 1200.17	Manning of the RC as an Operational Force
2009 Mar	AR 614-200	Enlisted assignments and use management
2009 Mar	MCO 1001R.1K	MCR administrative management manual
2010 Apr	DoDI 1100.22	Policy & Procedures for determining workforce mix
2010 Jun	ANGI 36-101	ANG AGR program
2010 Nov	ANGI 36-6	ANG Stat tour program
2011 Dec	DoDI 3020.41	Operational contract support policy, responsibilities and procedures
2011 Jan	MCO 1001.59	ADOS in support of the total force
2011 Feb	OPNAVINST 1001.26C	Management of NCR support to OPNAV
2011 Jun	MCO 1001.52J	AR support to MC
2011 Sep	OFPP Policy 11-01	Guidance on managing inherently governmental functions; outsourcing
2012 Feb	CNGBN 1401	FTS for CONUS contingency situations
2012 Mar	AFI 36-2132	AGR/ART program
2012 Apr	ANGI 36-2101	Assignments within the ANG
2013 Jul	DoDI 7041.04	Estimating full costs of civilian and active duty manpower and contracts

Date	Policy/Regulation	Description
2013 Jul	AR 71-32	Force Development and documentation
2013 Dec	DoDD 3160.01	Homeland Defense activities conducted by the NG
2014 Feb	MCO 12250.2	Civilian command level planning procedures
2014 May	DoDI 1205.18	Full-time support (FTS) to the Reserve Components
2014 Sept	DoDD 5105.83	NG JFHQ State
2014 Oct	CJCSI 1001.01B	Joint manpower and personnel program
2014 Nov	ANGI 16-501	ANG corporate process
2015 Apr	AFRCI 36-803	Air Reserve Technician T&A
2015 Jun	CNGBI 3100.01A	NG Counterdrug support
2015 Jun	OPNAVINST 1000.16L	Navy total force manpower policies and procedures
2016 Apr	ANGI 65-101	ANG workday
2016 Jun	CNGBI 1400.25	Technician personnel policy
2016 Jun	CNGBI 1001.01	NG JFHQ-State
2016 Dec	DoDI 1400.25	DoD Civilian Personnel Management System: with 79 Volumes

Table A-7. Summary Cost Element Source Matrix for Military FTS

Category	Description	Source
Cost to the Department of Defense (Program)		
Cash Compensation (Program)	Basic Pay & Salary	DFAS
	Housing & Subsistence Allowances	DFAS / PB / DTMO
	Incentive, Special & Other Pays	DFAS / PB
Benefits & Other Direct Costs (Program)	Cost of Living & Other Allowances	PB
	Retirement Accrual & Thrift Savings Plan	PB / DoD Actuary
	Subsistence-in-Kind	DFAS
	Federal Insurance Contributions Act Payments	SSA
	Permanent Change of Station & Other Travel	PB
	Current Medical Care & Health Benefits	OSD (C)
	Other Personnel Benefits & Costs	PB
	Specific Training (optional)	Services
	Separation & Severance Pays	PB
Cost to the Department of Defense		
Other Department of Defense	Installation Support	FYDP
	Personnel Administration	FYDP
	Personnel Benefits	FYDP
	General Training & Education	FYDP
Cost to the Federal Government		
Department of Veterans Affairs	Veterans Affairs Disability & Pension	CBO / IDA
	Veterans Affairs Health Care	CBO / IDA
	Veterans Affairs Other Benefits	CBO / IDA
Department of the Treasury	Concurrent Receipt of Retirement & Disability Pay	Actuary / Treasury
	Non-Medicare-Eligible Retiree Health Care (<65)	CBO
	Medicare-Eligible Retiree Health Care Fund (>65)	DoD Actuary
Ed	Impact Aid	OSD (CAPE)
OPM	Civilian Retiree Health Care	-
Labor	Training & Employment of Veterans	OSD (CAPE)
Revenue to the Federal Government		
Treasury	Tax Revenue	IRS / SSA
Cost & Revenue to the State Government		
State Treasury	Tax Revenue (no cost)	-
Cost & Revenue to the Local Government		
Local Treasury	Tax Revenue (no cost)	-

Table A-8. Summary Cost Element Source Matrix for Civilian FTS

Category	Description	Source
Cost to the Department of Defense (Program)		
Cash Compensation (Program)	Basic Pay & Salary	OPM, DCPAS
	Housing & Subsistence Allowances	-
	Incentive, Special & Other Pays	PB OP-8
Benefits & Other Direct Costs (Program)	Cost of Living & Other Allowances	PB
	Retirement Accrual & Thrift Savings Plan	PB OP-8
	Subsistence-in-Kind	-
	Federal Insurance Contributions Act Payments	PB OP-8
	Permanent Change of Station & Other Travel	PB OP-8
	Current Medical Care & Health Benefits	PB OP-8
	Other Personnel Benefits & Costs	PB OP-8
	Specific Training (optional)	OSD (CAPE)
Separation & Severance Pays	PB OP-8	
Cost to the Department of Defense		
Other Department of Defense	Installation Support	DoDI 7041.04
	Personnel Administration	OSD (CAPE)
	Personnel Benefits	
	General Training & Education	
Cost to the Federal Government		
Department of Veterans Affairs	Veterans Affairs Disability & Pension	-
	Veterans Affairs Health Care	-
	Veterans Affairs Other Benefits	-
Department of the Treasury	Concurrent Receipt of Retirement & Disability Pay	-
	Non-Medicare-Eligible Retiree Health Care (<65)	-
	Medicare-Eligible Retiree Health Care Fund (>65)	-
Ed	Impact Aid	OSD (CAPE)
OPM	Civilian Retiree Health Care	OPM
Labor	Training & Employment of Veterans	OSD (CAPE)
Revenue to the Federal Government		
Treasury	Tax Revenue	IRS / SSA
Cost & Revenue to the State Government		
State Treasury	Tax Revenue (no cost)	-
Cost & Revenue to the Local Government		
Local Treasury	Tax Revenue (no cost)	-

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Abbreviations

AC	Active Component
ADOS	Active Duty for Operational Support
AFI	Air Force Instruction
AFRC	Air Force Reserve Command
AFSC	Air Force Specialty Code
AGR	Active Guard and Reserve
ANG	Air National Guard
ARNG	Army National Guard
ART	Air Reserve Technician
ASD(M&RA)	Assistant Secretary of Defense for Manpower, Reserve Affairs, and Logistics
AT	Annual Training
BA	Budget Activity
BAS	Basic Allowance for Subsistence
BDE	Brigade
BN	Battalion
BRS	Blended Retirement System
CA	Cooperative Agreement (National Guard Bureau)
CAPE	Cost Assessment and Program Evaluation
CBO	Congressional Budget Office
CIV	Civilian Federal Employee
CMA	Centrally Managed Account
CNGB	Chief of the National Guard Bureau
COA	Course of Action
CONUS	Continental United States
CSRS	Civil Service Retirement System
CTR	Contractor
DCPAS	Defense Civilian Personnel Advisory Service
DFAR	Defense Federal Acquisition Regulation
DFARS	Defense Federal Acquisition Regulation Supplement
DFAS	Defense Finance & Accounting Service

DHP	Defense Health Program
DMDC	Defense Manpower Data Center
DoD	Department of Defense
DoDD	Department of Defense Directive
DoDI	Department of Defense Instruction
DSR	Discontinued Service Retirement
DTMO	Defense Travel Management Office
E-E	Emergency-Essential
EEO	Equal Employment Opportunity
FCoM	Full Cost of Manpower
FECA	Federal Employees' Compensation Act
FEDVIP	Federal Employees Dental and Vision Insurance Program
FEGLI	Federal Employees Group Life Insurance
FEHBP	Federal Employees Health Benefits Program
FERS	Federal Employees Retirement System
FLTCIP	Federal Long Term Care Insurance Program
FTS	Full-Time Support
FTTA	Full-Time Training and Administration
FWS	Federal Wage System
FY	Fiscal Year
FYDP	Five-Year Defense Plan
GAO	Government Accountability Office
GS	General Schedule
HQ	Headquarters
IDA	Institute for Defense Analyses
IDT	Inactive Duty Training
IRS	Internal Revenue Service
MERHCF	Medicare-Eligible Retiree Health Care Fund
MILPERS	Military Personnel
MOS	Military Occupational Specialty
MT	Military Technician (Dual-status)
MTOE	Modification Table of Organization and Equipment
NAF	Non-Appropriated Funded
NCE	Non-Combat Essential
NDAA	National Defense Authorization Act
NDST	Military Technician (Non-dual-status)

NG	National Guard
NGB	National Guard Bureau
NMERHC	Non-Medicare-Eligible Retiree Health Care
O&M	Operations and Maintenance
OASDI	Old-Age, Survivors, and Disability Insurance
OC	Object Class
OMB	Office of Management and Budget
OPM	Office of Personnel Management
OPTEMPO	Operating Tempo
OSD	Office of the Secretary of Defense
OSD(C)	Office of the Secretary of Defense (Comptroller)
PB	President's Budget
PCS	Permanent Change of Station
PII	Personally Identifiable Information
POM	Program Objective Memorandum
RC	Reserve Component
RFPB	Reserve Forces Policy Board
SAD	State Active Duty
SAG	Sub-Activity Group
SELRES	Selected Reserve
SGLI	Servicemembers Group Life Insurance
SSA	Social Security Administration
TAG	The Adjutant General
TAR	Training and Administration of the Reserves
TDA	Table of Distributions and Allowances
TDP	TRICARE Dental Program
TR	Traditional Reservist/Training Reservist
TRDP	TRICARE Retiree Dental Program
TRR	TRICARE Retired Reserve
TRS	TRICARE Reserve Select
TSP	Thrift Savings Plan
U.S.C.	United States Code
UCMJ	Uniform Code of Military Justice
US	United States
USAFR	United States Air Force Reserve
USAR	United States Army Reserve

USD(P&R)	Under Secretary of Defense for Personnel and Readiness
USERRA	Uniformed Services Employment and Reemployment Rights Act
USMCR	United States Marine Corps Reserve
USNR	United States Navy Reserve
USPFO	United States Property and Fiscal Officer
VA	Department of Veterans Affairs
WG	Wage Grade

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