



# Defense Acquisition Workforce Key Information

Facilities Engineering  
As of FY18Q2 (31 March 2018)



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# Fact Sheet



## Human Capital Fact Sheet

Defense Acquisition Workforce Facilities Engineering	FY 2008				FY2018Q2			
	FE Civilian (Civ)	FE Military (Mil)	Total FE (Civ+Mil)	Defense Acquisition Workforce	FE Civilian (Civ)	FE Military (Mil)	Total FE (Civ+Mil)	Defense Acquisition Workforce
<b>Size &amp; Composition</b>								
Workforce Size	4,919	1	4,920	125,879	10,581	3	10,584	166,593
Change in size from 2008	-	-	-	-	115%	200%	115%	32%
Civilian/Military Composition	100%	0%	-	88% / 12%	100%	0%	-	91% / 9%
<b>Educational Attainment</b>								
Bachelor's Degree or Higher	77%	0%	77%	77%	83%	100%	42%	84%
Graduate Degree	20%	0%	20%	29%	31%	100%	16%	40%
<b>Certification</b>								
Level I or Higher Achieved	47%	0%	47%	72%	71%	0%	71%	86%
Level II or Higher Achieved	41%	0%	41%	61%	67%	0%	67%	73%
Level III Achieved	0%	0%	0%	36%	25%	0%	25%	41%
Position Certification Requirement Met or Exceeded	40%	0%	40%	58%	59%	0%	59%	76%
Within 24 Months of Certification Requirement	44%	100%	44%	27%	39%	100%	39%	21%
Does Not Meet Certification Requirement	16%	0%	16%	14%	2%	0%	2%	3%
<b>Planning Considerations</b>								
Average Age	49	23	49	46	48	34	48	45
Workforce Life-Cycle Model (YRE)* % Future/Mid-Career/Senior	15/24/61(%)	-	-	20/23/57 (%)(Civ)	16/27/58(%)	-	-	24/26/50(%)
Average Years of Service	19	1	19	17	17	12	17	15
Retirement Eligible*	1,057(22%)	-	-	19,051(17%) (Civ)	2,584(24%)	-	-	29,699(20%)
Retirement Eligible w/in 5 Years*	995(20%)	-	-	21,315(19%) (Civ)	1,898(18%)	-	-	25,039(17%)
Total Gains/Losses*	1,344/825	-	-	14,245/15,030 (Civ)	2,662/1,143	-	-	15,324/12,050

Source: Data generated by OUSD(A&S)/Human Capital Initiatives using the A&S Workforce Data Mart & analysis support from RAND.



### Defense Acquisition Workforce Size Highlights

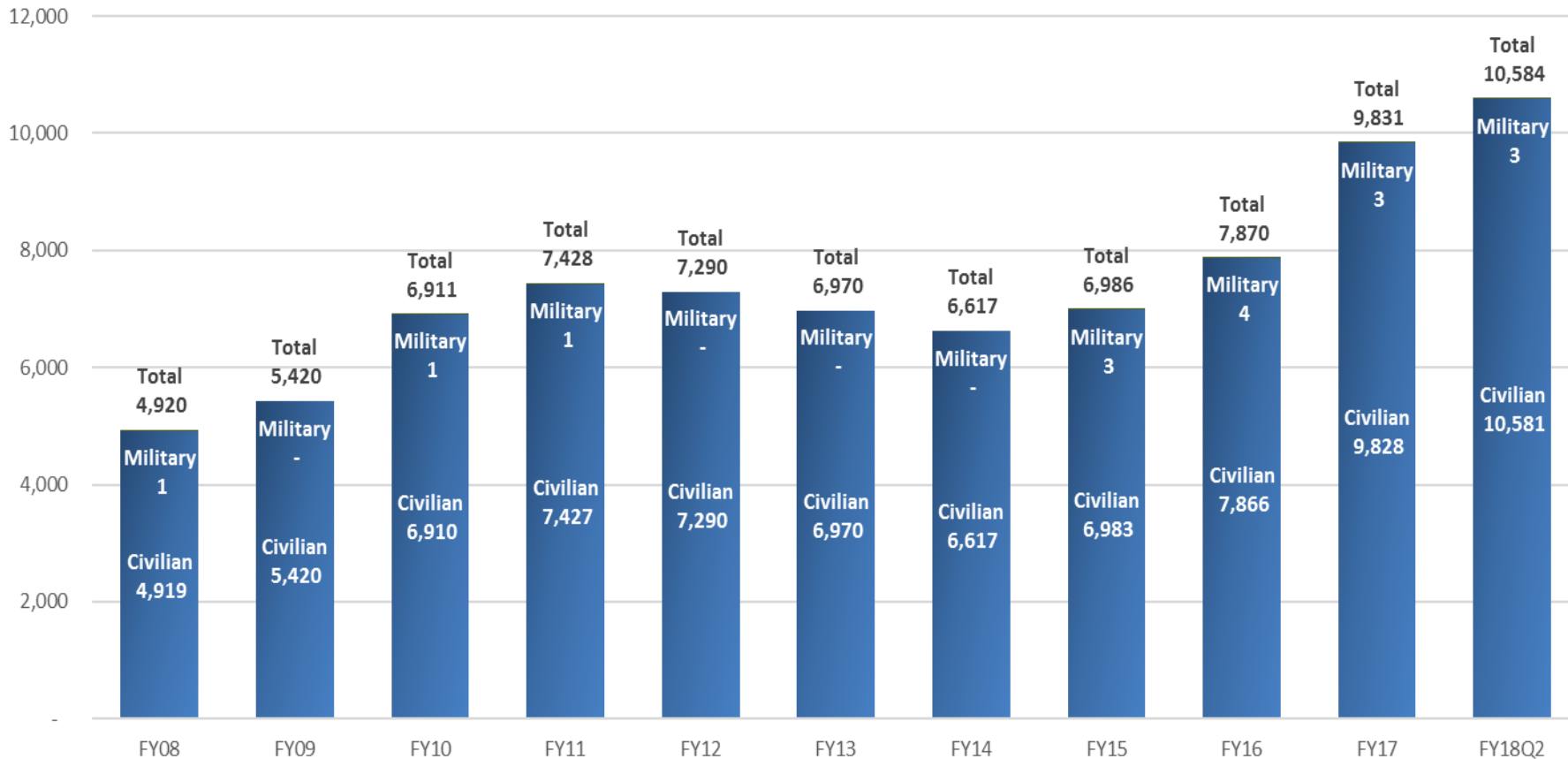
- The Facilities Engineering Career Field has experienced substantial growth since FY14, growing from 6,617 in FY14 to 10,584 at the end of this quarter. A large portion of that increase was due to recoding efforts. Since the beginning of FY17, over 72% (4,116) of all total gains have been recode gains (administrative gains). Army has increased its FE population by over 2800 recodes during this time period.
- Although FE has increased their workforce numbers substantially the distribution of the workforce has only changed minimally. 58% of the current FE population is in the Senior Career Group 58%. That is a decrease from a high of 63% in FY15, but still ranks as one of the highest of all the career fields. Over 40% of all FE gains are occurring in the Senior Group. There are significantly more gains in this group than losses.
- Overall attrition in the FE career field has decreased from a high of 11.7% at the end of FY15 to 8% at the end of FY17, but has risen in both FY18Q1 and Q2 to 9.1%.



# Total Historic Workforce

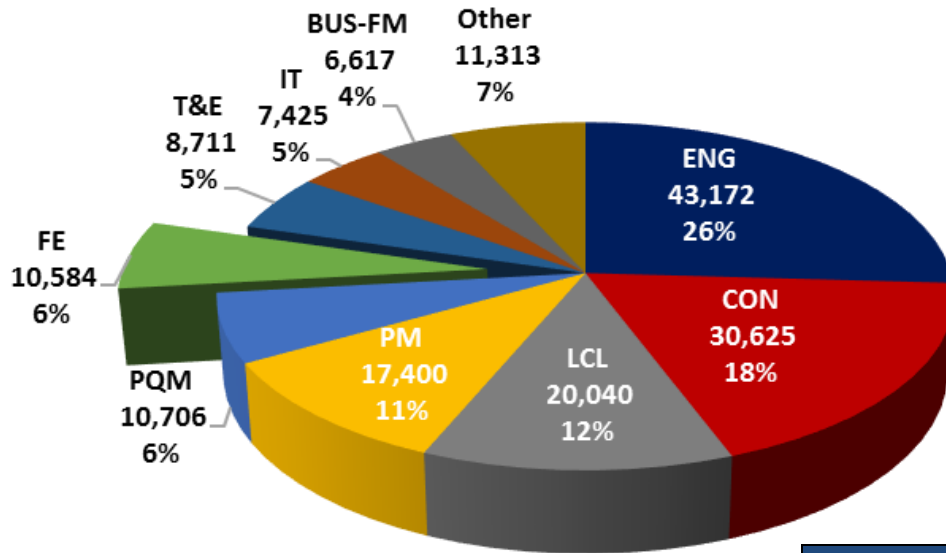


## Facilities Engineering





# AWF by Component and Career Field



FY18Q2 Totals	Army	Navy	Marine Corps	Air Force	4th Estate	Totals	% Total
Auditing	-	-	-	-	4,182	4,182	2.5%
Business - CE	259	523	36	512	87	1,417	0.9%
Business - FM	1,743	2,048	179	2,097	550	6,617	4.0%
Contracting	7,869	5,999	531	8,255	7,971	30,625	18.4%
Engineering	9,060	22,376	336	9,271	2,129	43,172	25.9%
Facilities Engineering	4,297	5,575	30	585	97	10,584	6.4%
Information Technology	1,735	3,043	219	1,369	1,059	7,425	4.5%
Life Cycle Logistics	6,952	5,974	626	3,347	3,141	20,040	12.0%
Production, Quality and Man	1,397	3,508	46	442	5,313	10,706	6.4%
Program Management	3,330	5,519	756	5,934	1,861	17,400	10.4%
Property	49	66	-	18	263	396	0.2%
Purchasing	365	372	48	59	515	1,359	0.8%
S&T Manager	475	514	4	2,830	119	3,942	2.4%
Test and Evaluation	1,861	3,203	130	3,150	367	8,711	5.2%
Unknown/Other	8	1	-	-	8	17	0.01%
<b>FY18Q2 Totals (as of 3-31-18)</b>	<b>39,400</b>	<b>58,721</b>	<b>2,941</b>	<b>37,869</b>	<b>27,662</b>	<b>166,593</b>	
<b>Component %</b>	<b>23.7%</b>	<b>35.2%</b>	<b>1.8%</b>	<b>22.7%</b>	<b>16.6%</b>		



# Facilities Engineering Workforce Historical Size by Agency FY08 – FY18Q2



Facilities Engineering Defense Acq Workforce Agency	FY08	FY10	FY12	FY14	FY16	FY17	FY18Q2	% Change Since FY08	% Change Since FY17
Navy	3,902	5,301	5,508	4,998	5,456	5,541	5,575	43%	1%
MARINE CORPS	-	18	23	41	34	30	30		0%
ARMY	988	1,564	1,708	1,530	1,797	3,581	4,297	335%	20%
AIR FORCE	6	20	29	4	498	591	585	9650%	-1%
DCMA	6	1	1	-	1	1	1	-83%	0%
DLA	13	2	1	1	1	-	-	-100%	
MDA	1	4	19	42	42	46	48	4700%	4%
DISA	-	-	-	-	8	13	14		8%
DTRA	2	1	1	1	1	1	1	-50%	0%
DAU	1	-	-	-	2	1	2	100%	100%
DeCA	-	-	-	-	30	26	31		19%
DSS	1	-	-	-	-	-	-	-100%	
<b>TOTAL</b>	<b>4,920</b>	<b>6,911</b>	<b>7,290</b>	<b>6,617</b>	<b>7,870</b>	<b>9,831</b>	<b>10,584</b>	<b>↑ 115%</b>	<b>↑ 8%</b>



# Facilities Engineering Workforce Historical Size (Quarterly) by Agency FY16Q1 – FY18Q2



Facilities Engineering Defense Acq Workforce Agency	FY16Q1	FY16Q2	FY16Q3	FY16Q4	FY17Q1	FY17Q2	FY17Q3	FY17Q4	FY18Q1	FY18Q2	% Change Since FY17Q2
Navy	5,321	5,406	5,476	5,456	5,481	5,458	5,507	5,541	5,573	5,575	2%
ARMY	1,514	1,498	1,557	1,797	1,842	2,981	3,233	3,581	4,207	4,297	44%
AIR FORCE	186	270	283	498	498	512	520	591	573	585	14%
MARINE CORPS	32	34	34	34	33	33	34	30	31	30	-9%
DCMA	3	1	1	1	1	1	1	1	1	1	0%
DLA	1	1	1	1	1	1	1	-	-	-	-100%
MDA	41	43	41	42	41	43	44	46	46	48	12%
DISA	-	6	7	8	8	9	13	13	13	14	56%
DTRA	1	1	1	1	1	-	-	1	1	1	
DAU	1	1	1	2	1	1	1	1	2	2	100%
DeCA	19	24	26	30	29	28	28	26	28	31	11%
<b>TOTAL</b>	<b>7,119</b>	<b>7,285</b>	<b>7,428</b>	<b>7,870</b>	<b>7,936</b>	<b>9,067</b>	<b>9,382</b>	<b>9,831</b>	<b>10,475</b>	<b>10,584</b>	<b>↑ 17%</b>

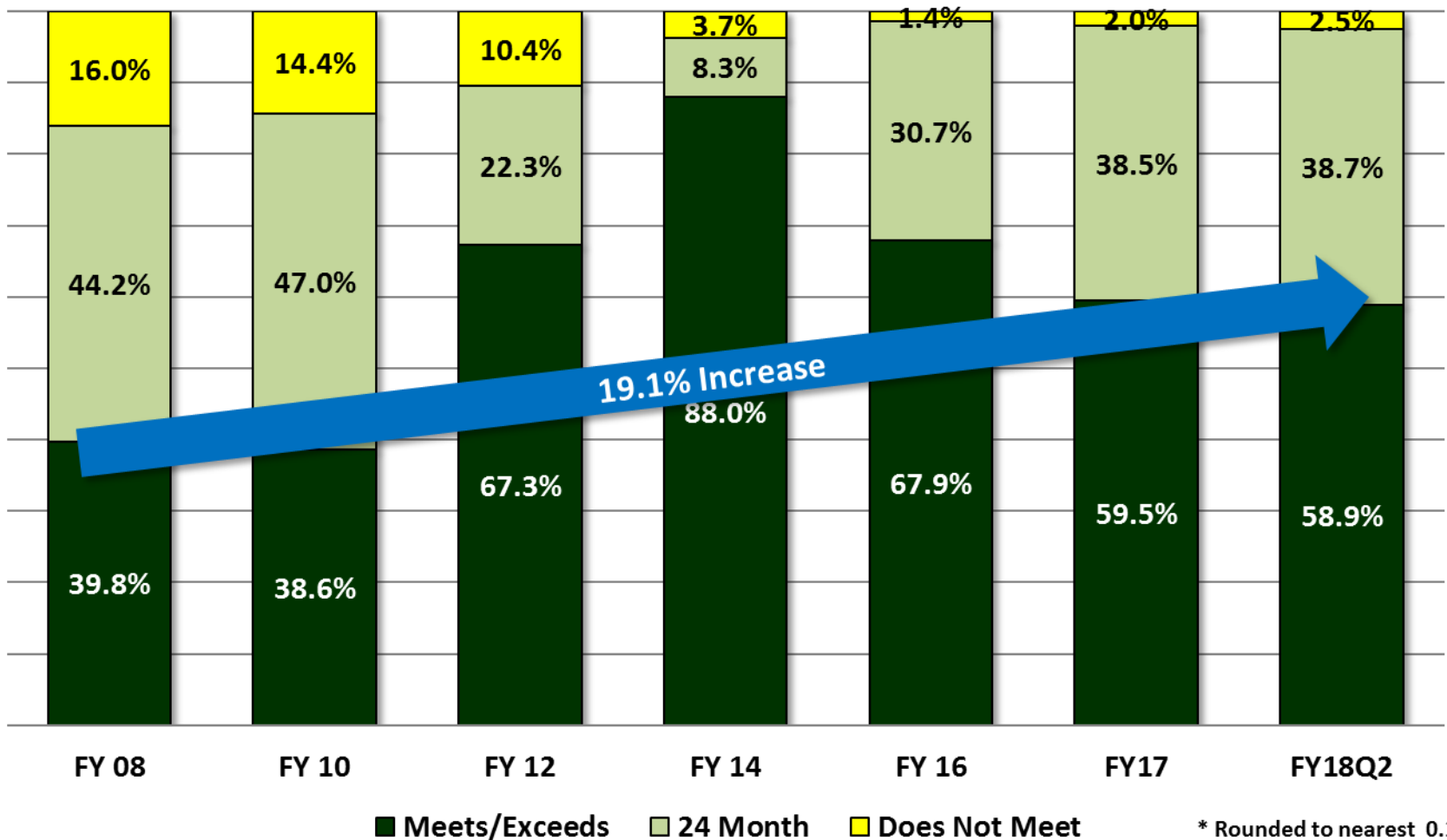




# Facilities Engineering Historical DAWIA Certification FY08 – FY18Q2



## Facilities Engineering

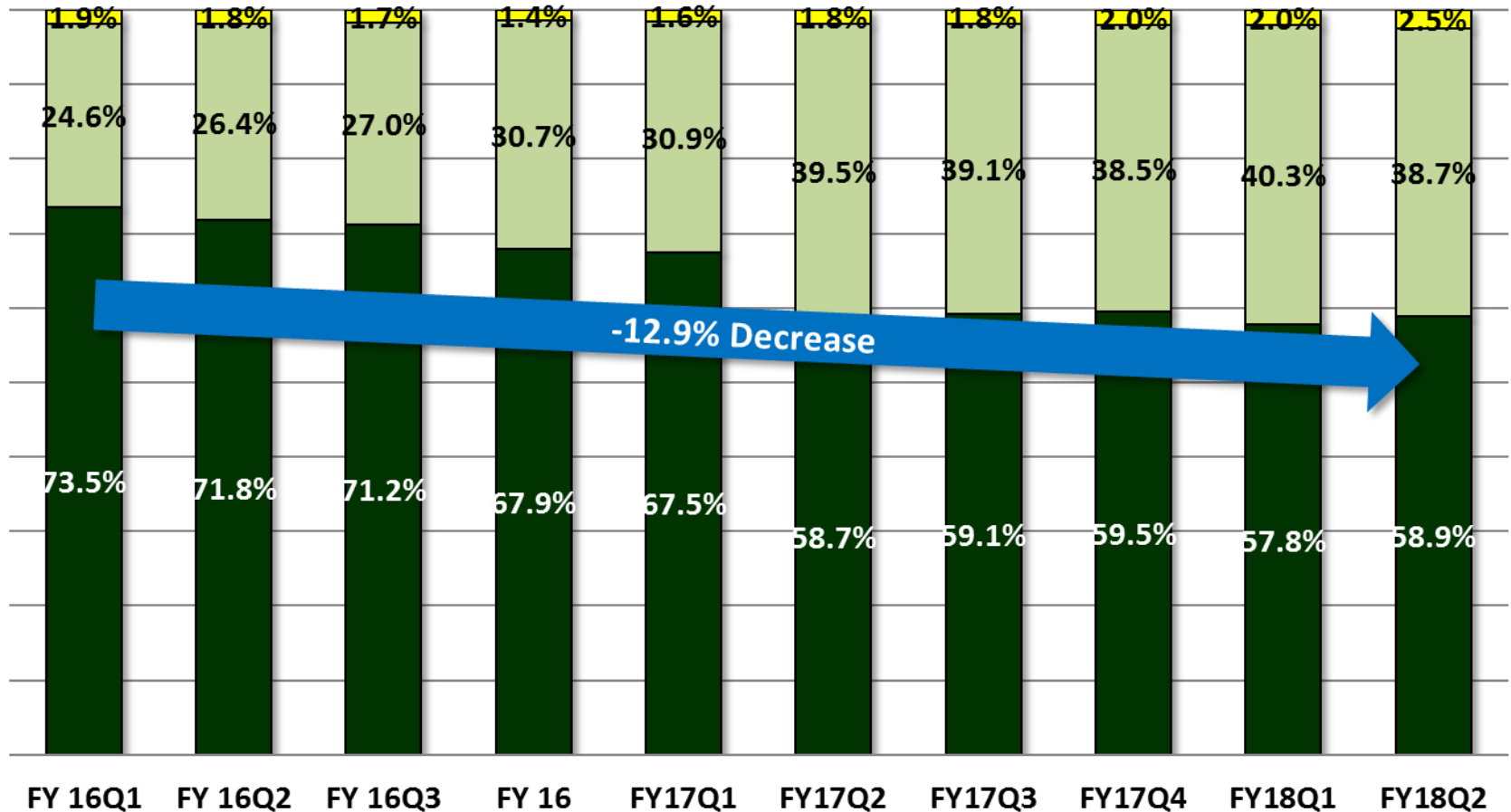




# Facilities Engineering Historical (Quarterly) DAWIA Certification FY16Q2 – FY18Q2



## Facilities Engineering



■ Meets/Exceeds   ■ 24 Month   ■ Does Not Meet

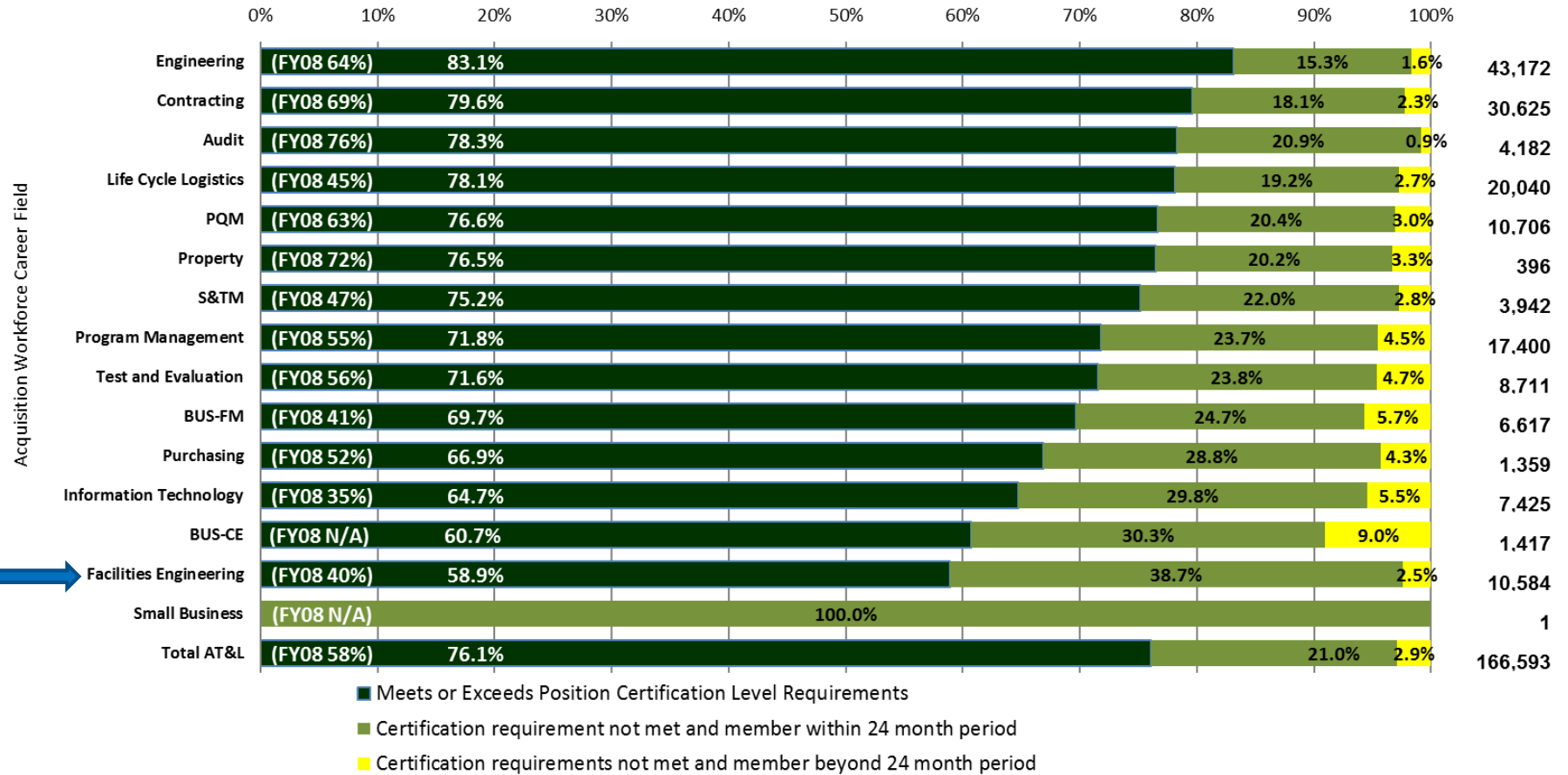
\* Rounded to nearest 0.1%



# DAWIA Certification by Career Field



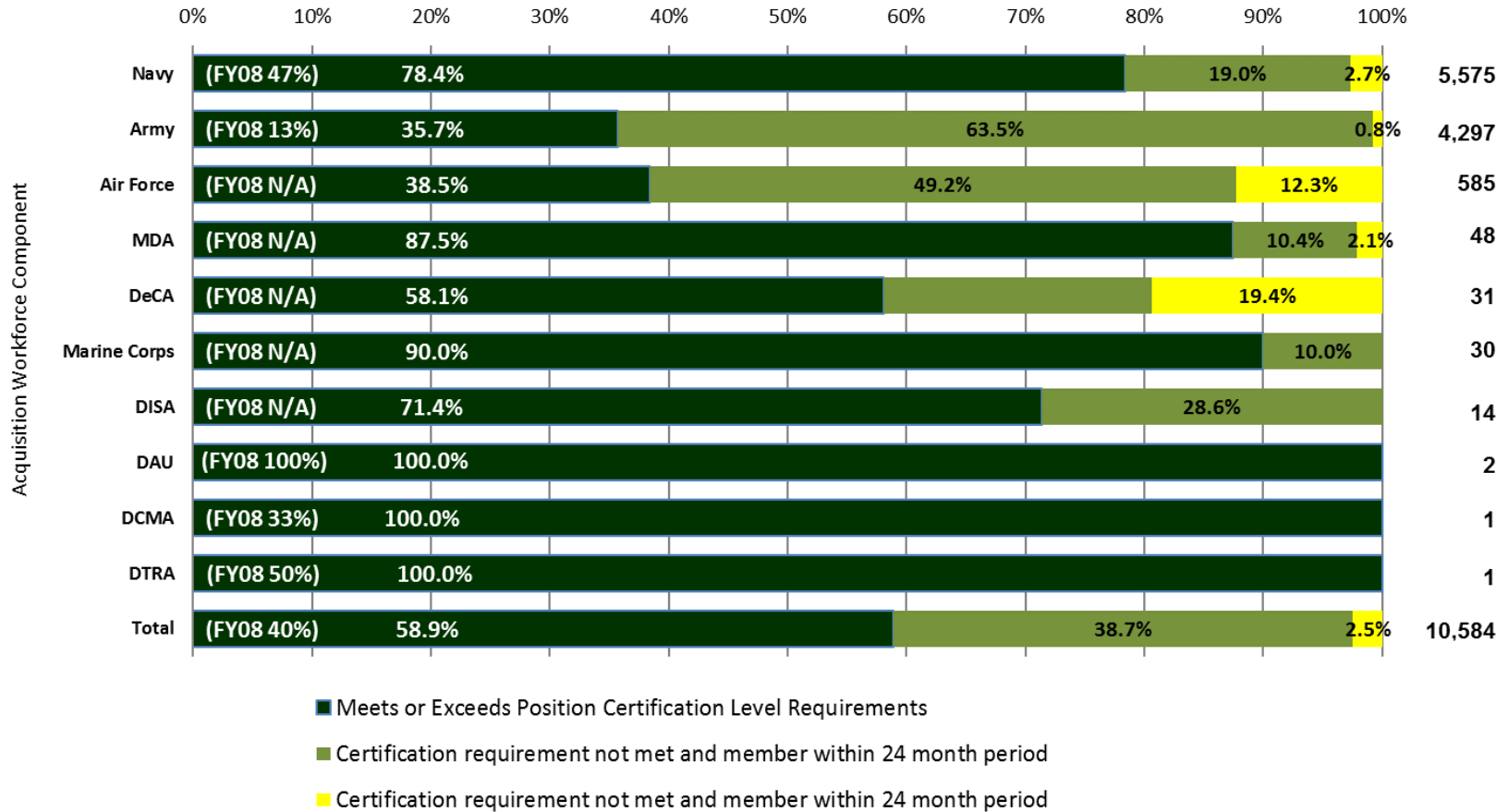
## Certification Level "Meet/Exceed" Rates by Career Field AT&L (FY18Q2)





# Facilities Engineering DAWIA Certification by Component

## Certification Level "Meet/Exceed" Rates by Component Facilities Engineering (FY18Q2)





# Facilities Engineering DAWIA Certification Matrix + Bench Strength



Facilities Engineering		Achieved Certification Level				FY18Q2 TOTAL	% Meets Certification Requirement
Required Certification Level	No Level Achieved	Level I	Level II	Level III			
Level I	116	74	80	18	288	59.7%	
Level II	1,923	254	3,461	280	5,918	63.2%	
Level III	1,060	58	942	2,318	4,378	52.9%	
<i>Unspecified</i>	-	-	-	-	-		
<b>FY18Q2 TOTAL</b>	<b>3,099</b>	<b>386</b>	<b>4,483</b>	<b>2,616</b>	<b>10,584</b>	<b>58.9%</b>	
	29.3%	3.6%	42.4%	24.7%			

No Level Achieved includes those within the 24 month grace period

Bench Strength			
Org	# Meet or Exceeds	% Meets or Exceeds*	Career Field Rank
DAW	126,761	76.1%	
Army	31,111	79.0%	
Navy	44,599	76.0%	
Marine Cor	2,036	69.2%	
Air Force	27,058	71.5%	
4th Estate	21,957	77.6%	
<b>Facilities En</b>	<b>6,231</b>	<b>58.9%</b>	<b>14 of 14</b>

\*\* Based on population total without unspecified positions

Certification Requirement	Meets	Within 24 Months	Does Not Meet	DAW TOTAL	
Level I	172	111	5	288	2.7%
Level II	3,741	2,037	140	5,918	55.9%
Level III	2,318	1,945	115	4,378	41.4%
<i>Unspecified</i>	-	-	-	-	0.0%
<b>Facilities Engineering TOTAL</b>	<b>6,231</b>	<b>4,093</b>	<b>260</b>	<b>10,584</b>	
	58.9%	38.7%	2.5%		

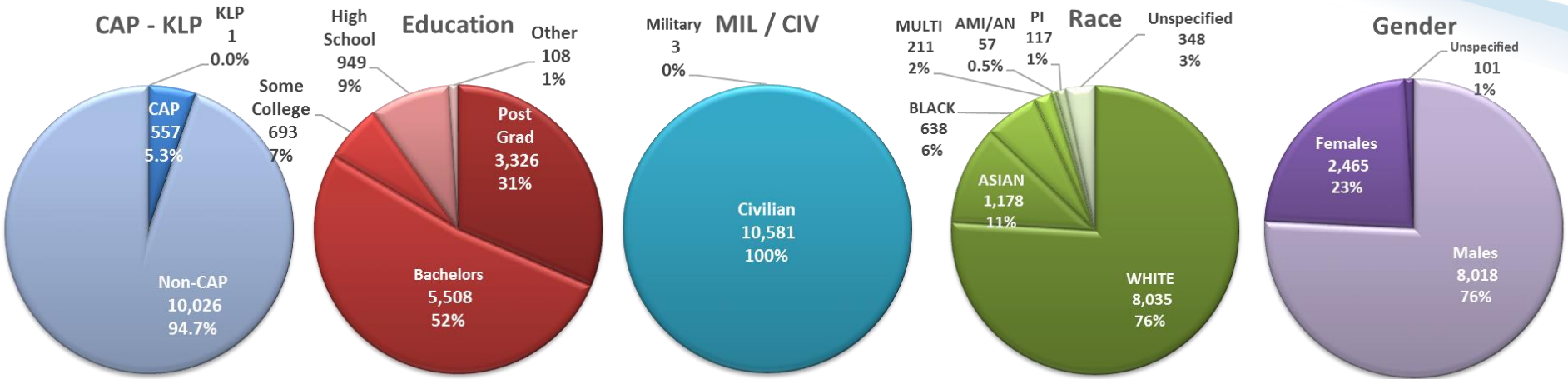
= Compliance

= Exceeds Requirements

\* NOTE: Rounded to nearest 0.1%



# Facilities Engineering Demographics



Occupied Position Type	FE	Entire DAW
Key Leadership Positions (KLPs)	1	1,076
Critical Acquisition Positions (CAPs) *	557	16,456
Non-CAP Positions	10,026	148,920
Unknown	-	141
<b>TOTAL</b>	<b>10,584</b>	<b>166,593</b>

\* = Number of CAPs, excluding KLPs (no double counts)

Race	FE	Entire DAW
WHITE	8,035	122,344
ASIAN	1,178	20,072
BLACK	638	11,222
MULTI	211	4,403
AMI/AN	57	971
PI	117	833
Unspecified	348	6,748
<b>TOTAL</b>	<b>10,584</b>	<b>166,593</b>

Highest Level of Education	FE	Entire DAW
Post Grad	3,326	67,163
Bachelors	5,508	73,237
Some College	693	11,741
High School	949	12,374
Other	108	2,078
<b>TOTAL</b>	<b>10,584</b>	<b>166,593</b>

Gender	FE	Entire DAW
Males	8,018	117,018
Females	2,465	48,016
Unspecified	101	1,559
<b>TOTAL</b>	<b>10,584</b>	<b>166,593</b>

Military / Civilian	FE	Entire DAW
Civilian	10,581	151,056
Military	3	15,537
<b>TOTAL</b>	<b>10,584</b>	<b>166,593</b>



# Facilities Engineering Size by Occupational Series

Civilian Occupational Series	FE	
0810 - Engineer, Civil	2,479	23.4%
0801 - Engineer, General	1,093	10.3%
0802 - Engineering Technician	1,018	9.6%
0819 - Engineer, Environmental	675	6.38%
0830 - Engineer, Mechanical	662	6.26%
0808 - Architect	564	5.33%
1101 - Business and Industry Specialist	539	5.09%
0850 - Engineer, Electrical	547	5.17%
0340 - Program Manager	381	3.60%
0020 - Community Planner	304	2.87%
<i>Other</i>	<b>2,319</b>	<b>21.92%</b>
<b>TOTAL CIVILIAN</b>	<b>10,581</b>	<b>Civilians</b>

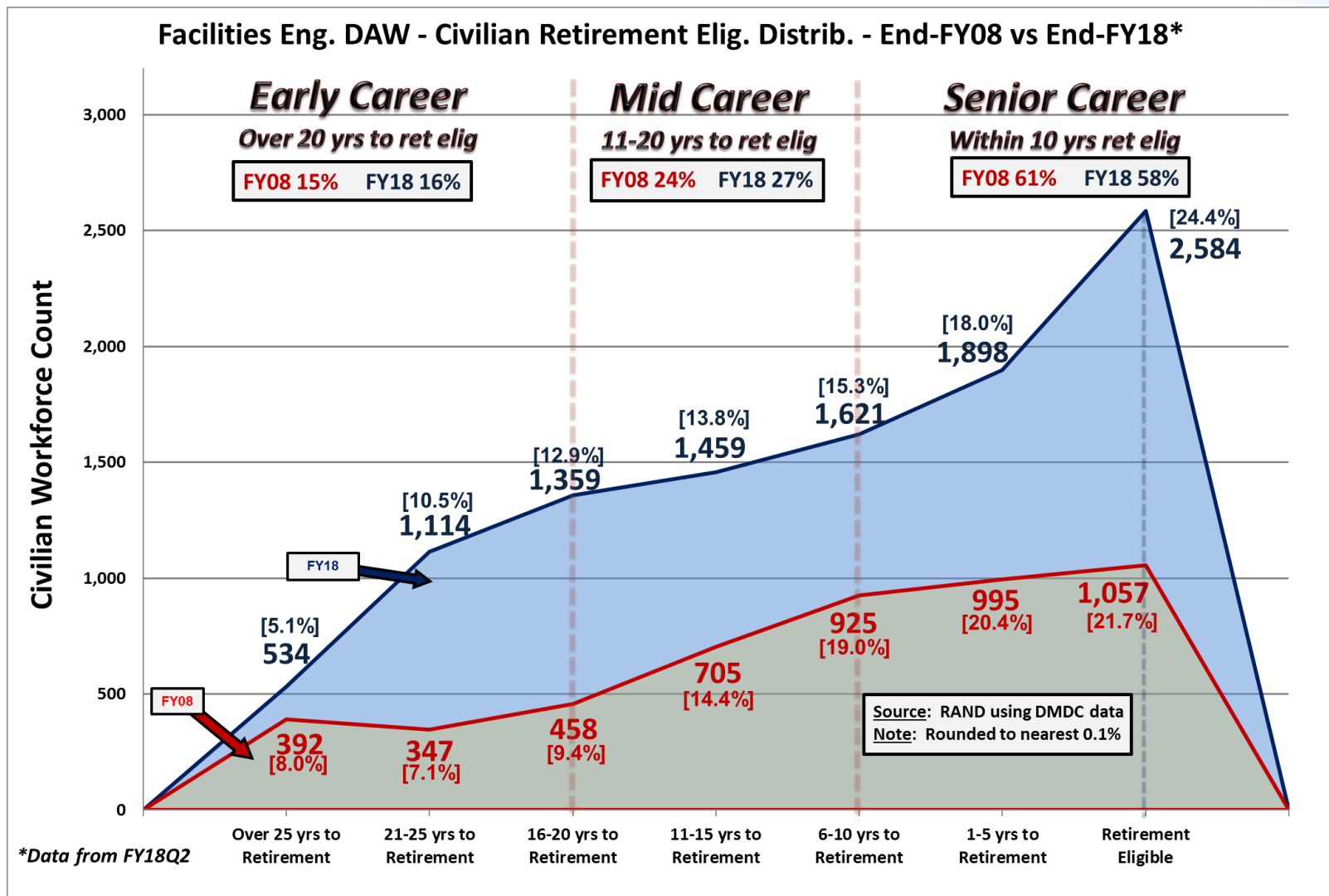


**RAND NDRI Forces and Resources  
Policy Center Data  
Retirement / Loss Slides  
FY18Q2**





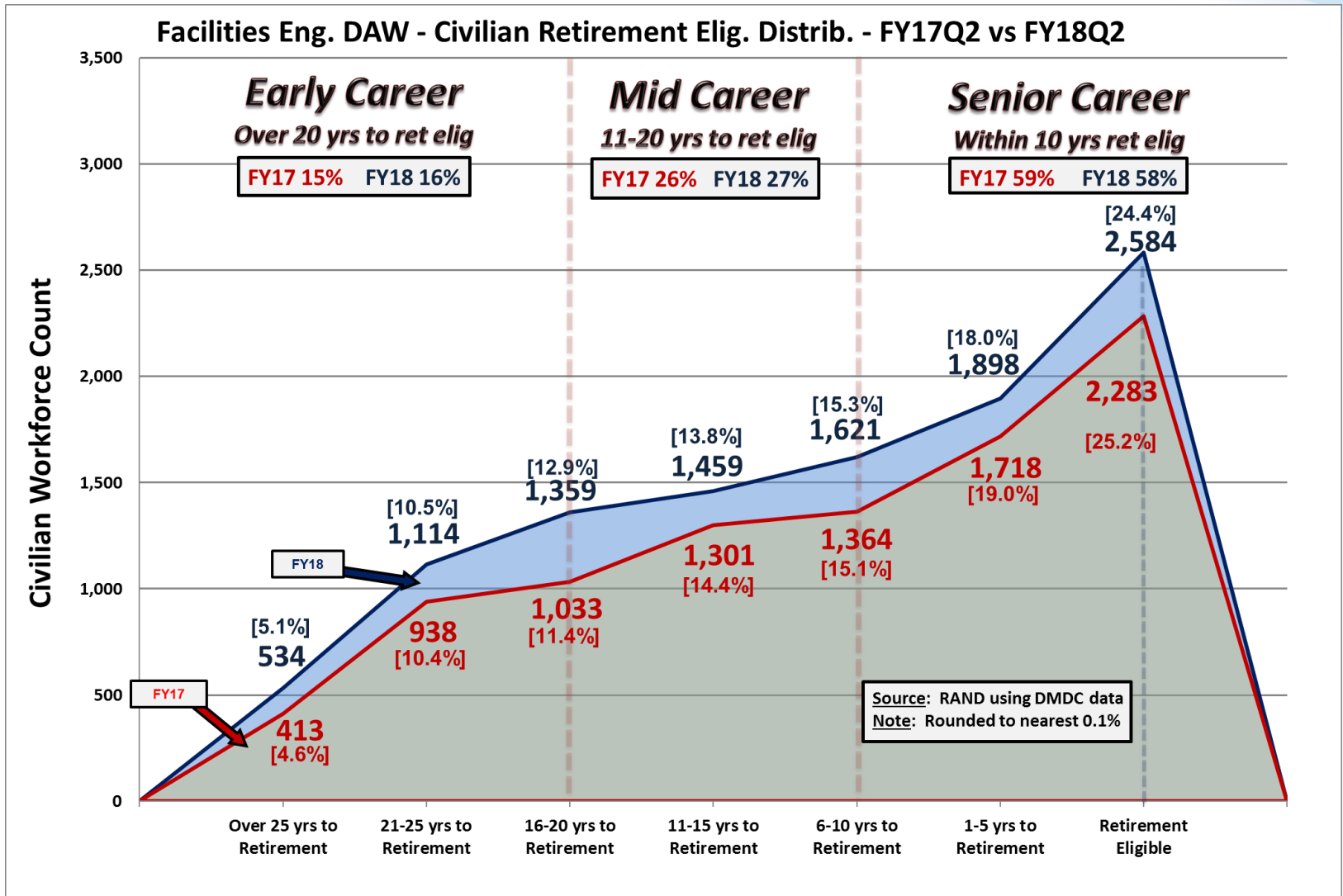
# Facilities Engineering Civilian Retirement Eligibility Distribution – FY08 / FY18



As of 31 Mar 2018



# Facilities Engineering Civilian Retirement Eligibility Distribution, 1 year – FY17Q1 / FY18Q1



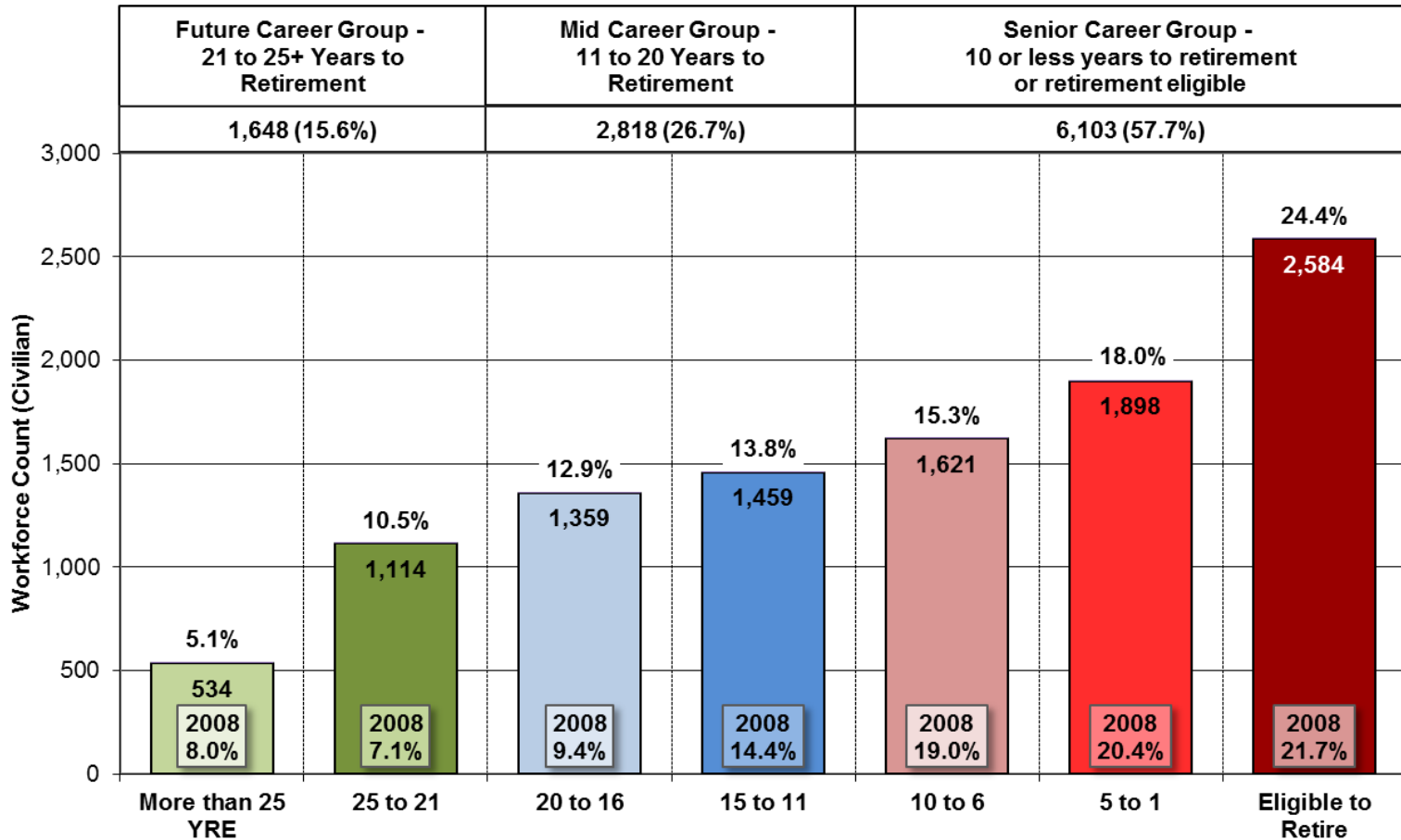
As of 31 Mar 2018



# Facilities Engineering Workforce Lifecycle Model by YRE



**Defense Acquisition Workforce Lifecycle Model (WLM)**  
by Years to Retirement Eligibility (YRE) - Civilian (FY2018Q2) - Facilities Engineering



Source: Chart was generated by OUSD(A&S)/Human Capital Initiatives using FY2008 and FY2017 (Q4) DMDC data provided by RAND.

As of 31 Mar 2018

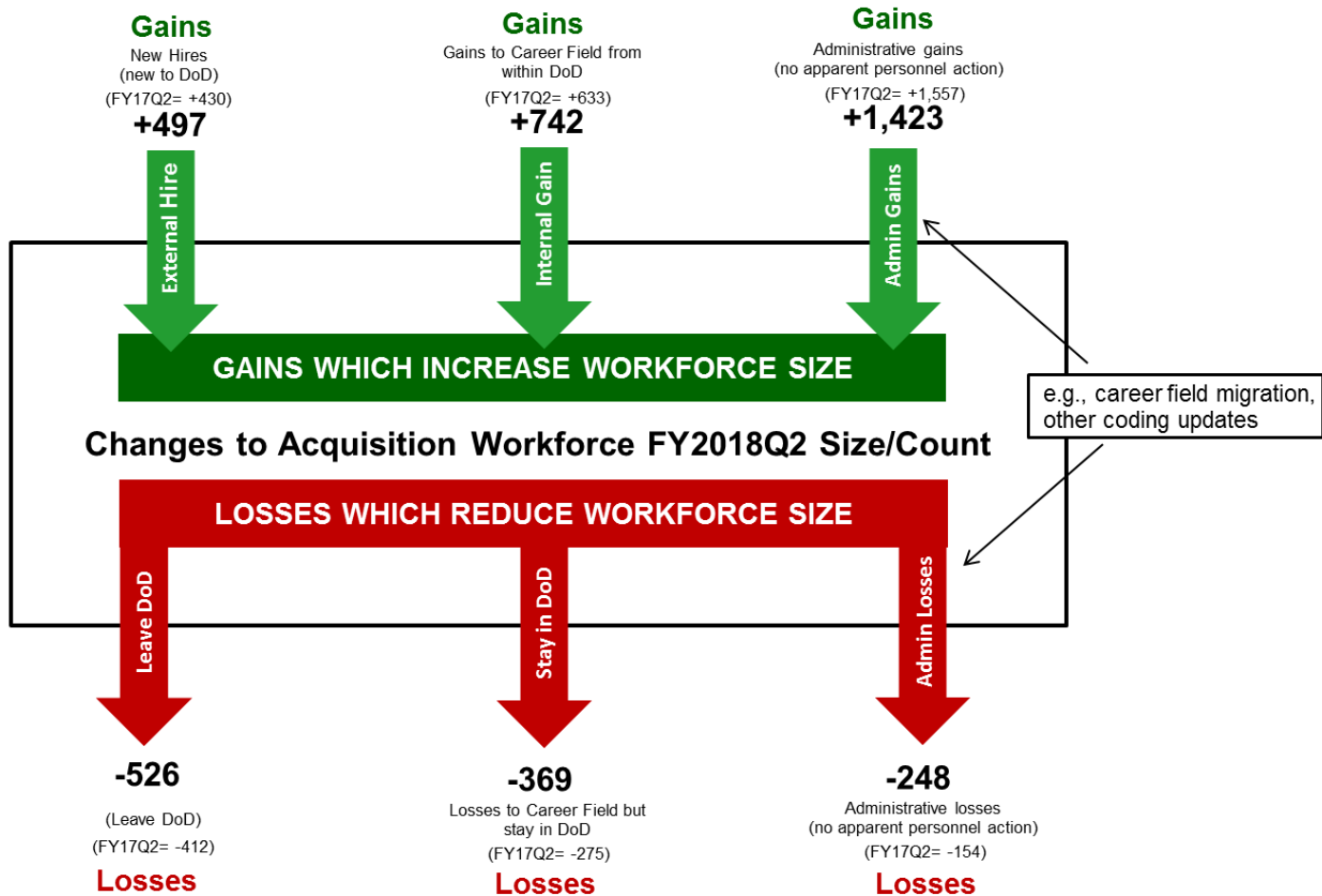


# Facilities Engineering Gains/Losses – New Hires Internal/External, Administrative



## Defense Acquisition Workforce (Civilian) (FY2018Q2) - Facilities Engineering

Gains and Losses by External to DoD, Internal to DoD, and Administrative Categories



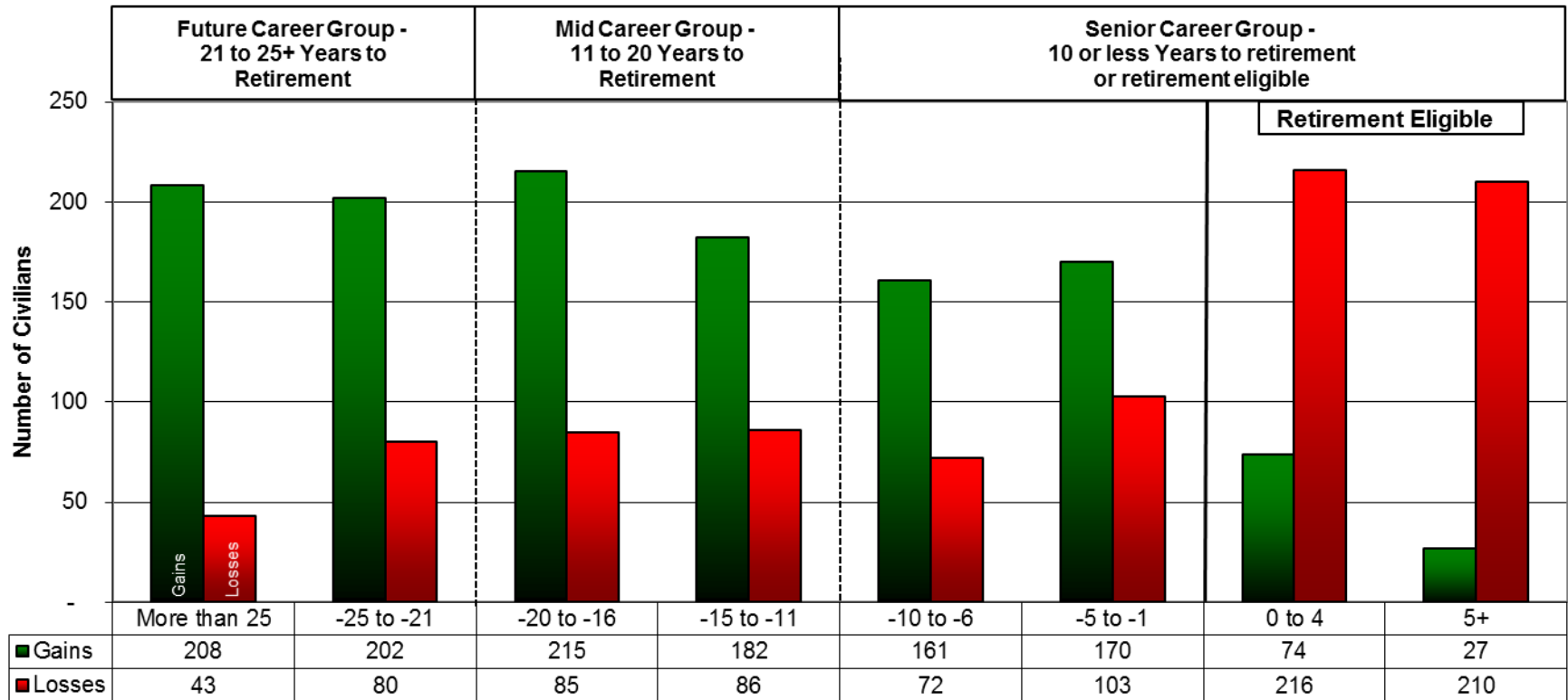


# Facilities Engineering Gains and Losses by YRE Groups



## Defense Acquisition Workforce (Civilian) - Facilities Engineering

Workforce Lifecycle FY2018Q2 Gains & Losses\*

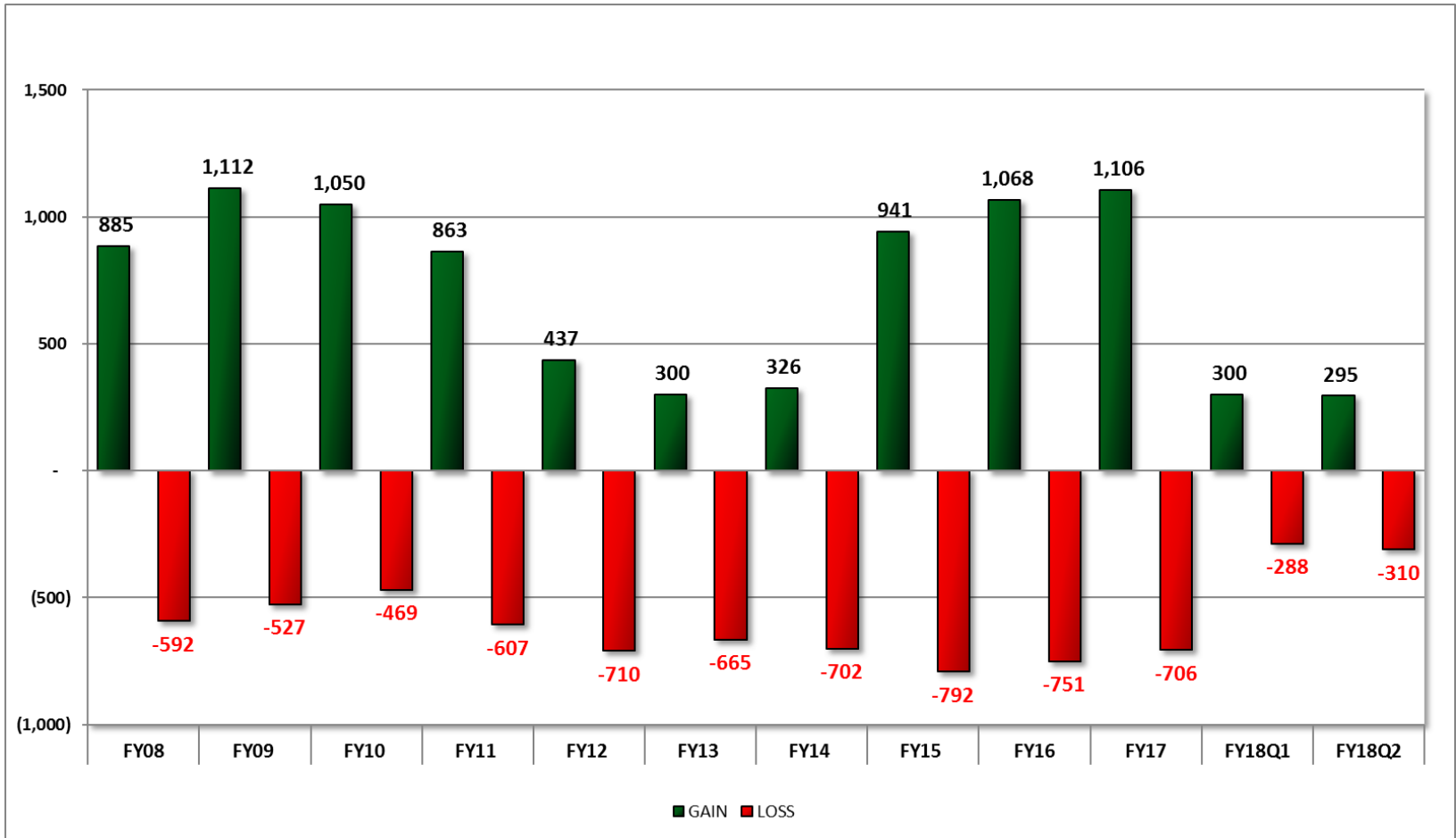


Career Lifecycle by Years to Retirement Eligibility

\*Does not include administrative gains and losses



# Facilities Engineering Historical Gains and Losses FY08 – FY18Q2



As of 31 Mar 2018

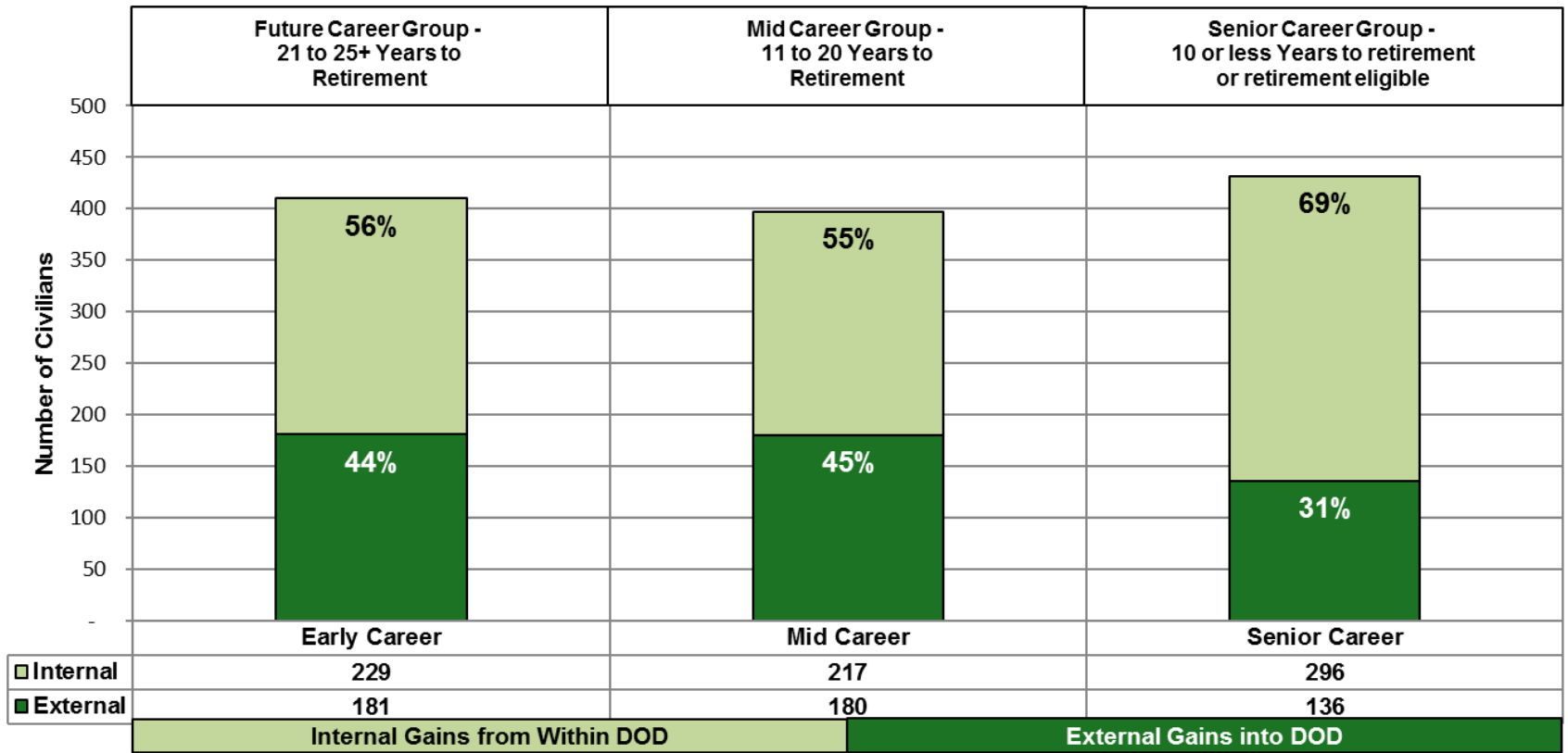


# Facilities Engineering Internal/External Gains % by Career Group



## Defense Acquisition Workforce (Civilian) - Facilities Engineering

Workforce Lifecycle FY2018Q2 Gains\*



\*Does not include administrative gains

Source: RAND NDRI Forces and Resources Policy Center analysis using DMDC data (FY2018Q2 and Previous FY Data)

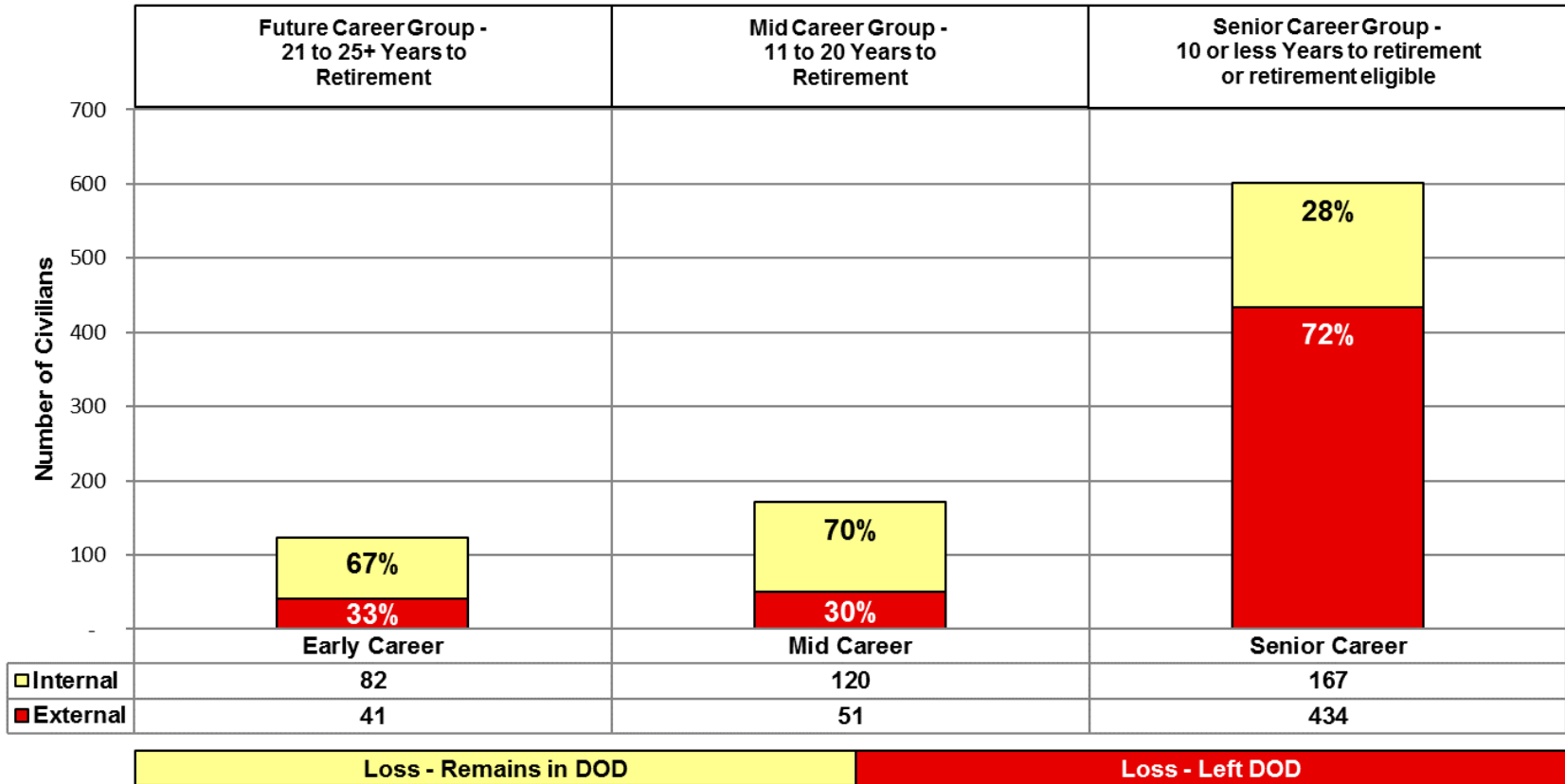


# Facilities Engineering Internal/External Loss % by Career Group



## Defense Acquisition Workforce (Civilian) - Facilities Engineering

### Workforce Lifecycle FY2018Q2 Losses\*



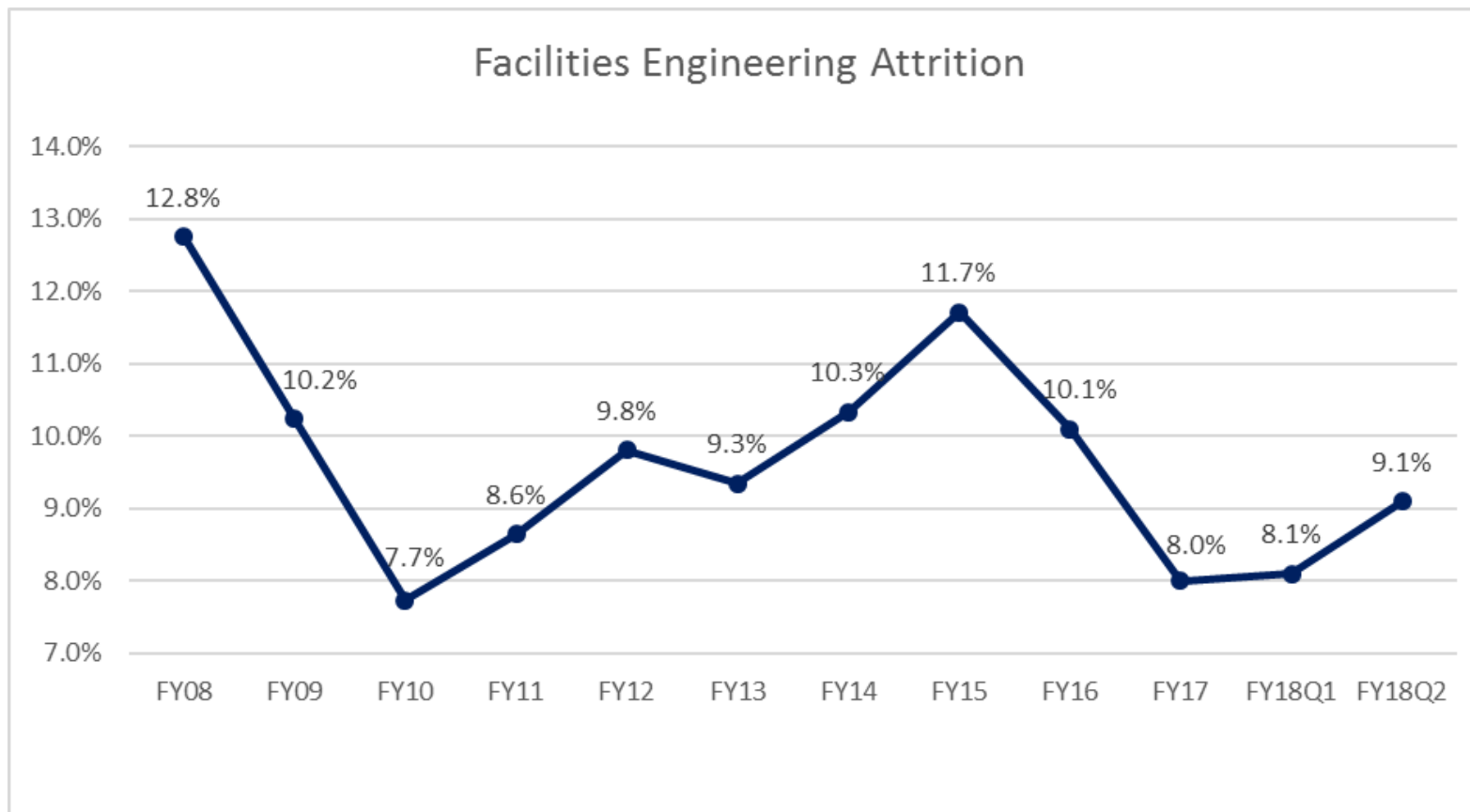
Source: RAND NDRI Forces and Resources Policy Center analysis using DMDC data (FY2018Q2 and Previous FY Data)

\*Does not include administrative losses





# Annual Attrition Rates



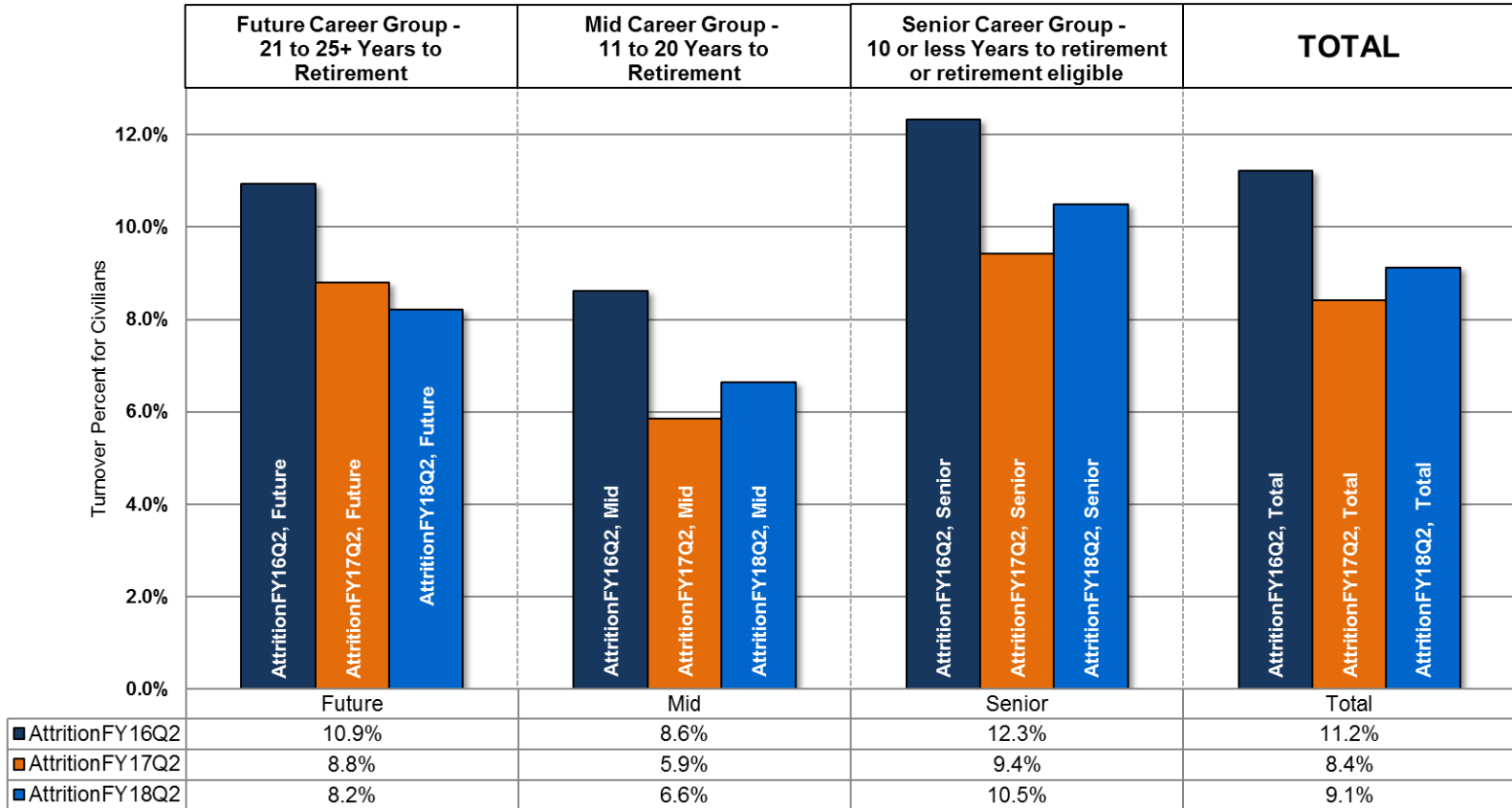
\*FY18Q2 includes attrition rate from end of FY17Q2 through FY18Q2



# Facilities Engineering Attrition Rates by Career Group



**Defense Acquisition Workforce Attrition - Facilities Engineering (Civilian)  
(FY16Q2, FY17Q2, FY18Q2)(by Career Lifecycle Group)**



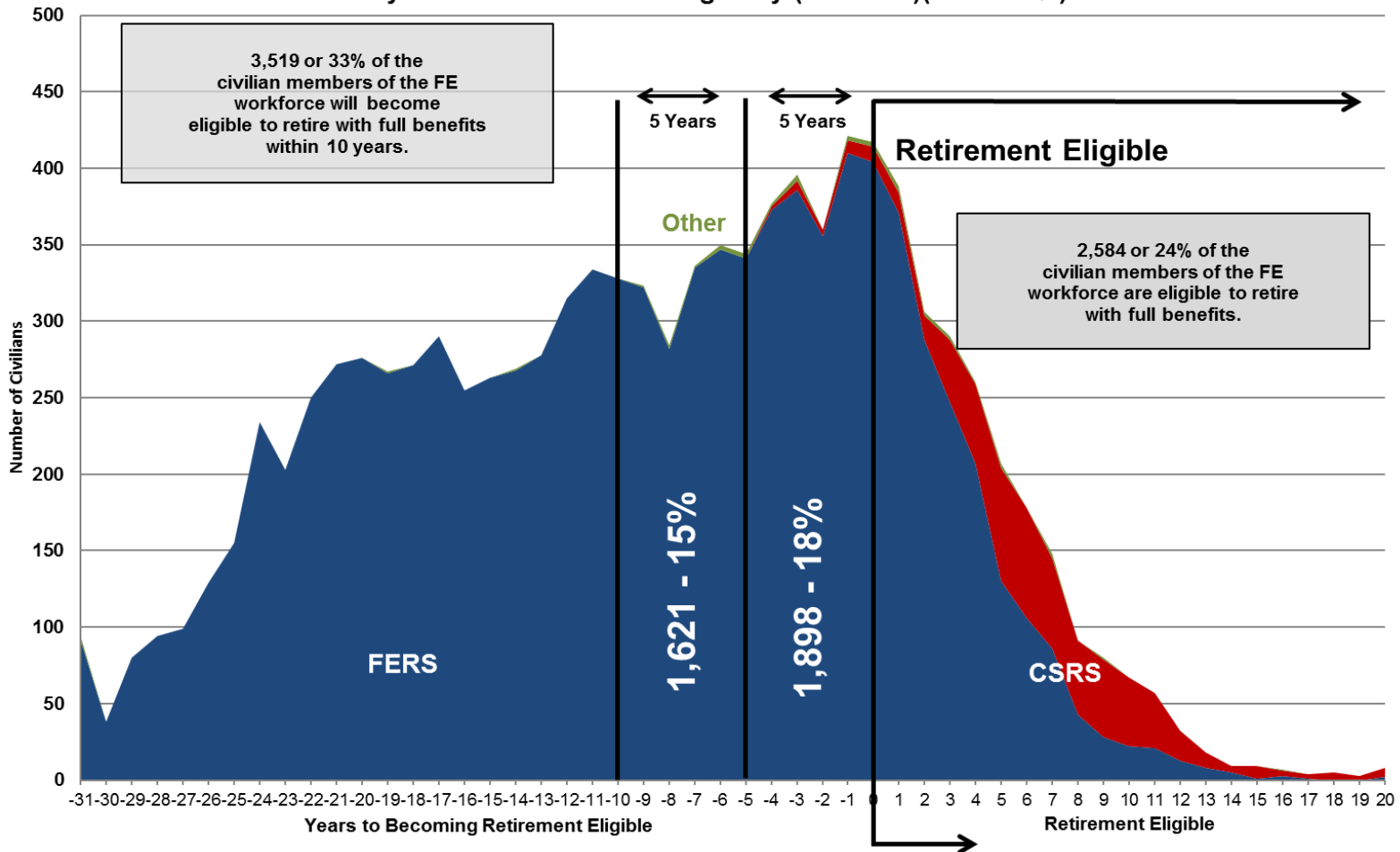
As of 31 Mar 2018



# Facilities Engineering Civilian Distribution by Years to Retirement Eligibility

## Defense Acquisition Workforce - Facilities Engineering

### Distribution by Years to Retirement Eligibility (Civilians)(FY2018Q2)



As of 31 Mar 2018



***END***