



Defense Acquisition Workforce Key Information

Engineering

As of FY15 (30 September 2015)



Overview



- AT&L HCI is committed to providing the Functional Leader and FIPT Executive Secretary up-to-date key workforce information on a quarterly basis – we welcome questions and recommendations for improved information and analysis support
- HCI provides defense acquisition workforce-wide updates online also at http://hci.dau.mil/inf_sum.html
- Key HCI support contacts
 - **HCI Functional Leader/FIPT Liaison Mr. Charles Sumpter**
 - **HCI Data/Analysis**
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Fact Sheet



Human Capital Fact Sheet								
Defense Acquisition Workforce Engineering	FY 2008				FY 2015Q4			
	Engineering Civilian (Civ)	Engineering Military (Mil)	Total Engineering (Civ+Mil)	Defense Acquisition Workforce	Engineering Civilian (Civ)	Engineering Military (Mil)	Total Engineering (Civ+Mil)	Defense Acquisition Workforce
Size & Composition								
Workforce Size	32,421	2,116	34,537	125,879	39,425	1,613	41,038	156,313
Change in size from 2008	-	-	-	-	22%	-	19%	24%
Civilian/Military Composition	94%	6%	-	88% / 12%	96%	4%	-	90% / 10%
Educational Attainment								
Bachelor's Degree or Higher	98%	95%	98%	77%	99%	98%	99%	84%
Graduate Degree	36%	45%	36%	29%	41%	62%	42%	39%
Certification								
Level I or Higher Achieved	78%	57%	77%	72%	89%	79%	88%	85%
Level II or Higher Achieved	70%	25%	68%	61%	79%	53%	78%	74%
Level III Achieved	58%	8%	55%	36%	59%	22%	57%	44%
Position Certification Requirement Met or Exceeded	66%	31%	64%	58%	82%	60%	81%	76%
Within 24 Months of Certification Requirement	18%	52%	20%	27%	15%	37%	16%	21%
Does Not Meet Certification Requirement	15%	17%	15%	14%	2%	3%	3%	4%
Planning Considerations								
% Baby Boomer / Traditional Gen.	60%	8%	57%	62%	38%	1%	37%	40%
Average Age	44.6	32.5	43.8	45.7	44.1	32.2	43.6	45.1
Workforce Life-Cycle Model (YRE)* % Future/Mid-Career/Senior	27/24/49(%)	-	-	20/23/57 (%)(Civ)	33/20/46(%)	-	-	25/23/52(%) (Civ)
Average Years of Service	16.7	8.9	16.2	17.3	15.6	9.3	15.3	15.2
Retirement Eligible*	3,965(12%)	-	-	19,051(17%) (Civ)	6,186(16%)	-	-	22,436(17%) (Civ)
Retirement Eligible w/i 5 Years*	4,804(15%)	-	-	21,315(19%) (Civ)	7,262(18%)	-	-	25,749(19%) (Civ)
Total Gains/Losses*	4,050/4,197	-	-	14,245/15,030 (Civ)	4,865/2,517	-	-	17,044/10,596 (Civ)

Source: The Human Capital Fact Sheet is based on end of FY2008 and end of FY2015 data and was generated by OUSD(AT&L)/Human Capital Initiatives using the AT&L Workforce Data Mart.

*Analysis support from RAND using FY2008 and FY2015 DMDC data.



Highlights



Defense Acquisition Workforce Size Highlights

- The current Engineering Defense Acquisition Workforce count is 41,050, up from 34,537 in FY08, a total increase of 6,513
- The Engineering Defense Acquisition Workforce count was at its highest point 41,050 in FY15, and its lowest point (34,537) in FY08
- The Agencies with the largest increases, since FY08, are NAVY, AIR FORCE, and DCMA, with increases of 4,605 (28%), 2,474 (38%), and 899 (319%), respectively
- The Agencies with the largest decreases, since FY08, are ARMY, DISA, and DLA, with decreases of 1,783 (-17%), 19 (-21%), and 8 (-42%), respectively

Defense Acquisition Workforce DAWIA Certification Highlights

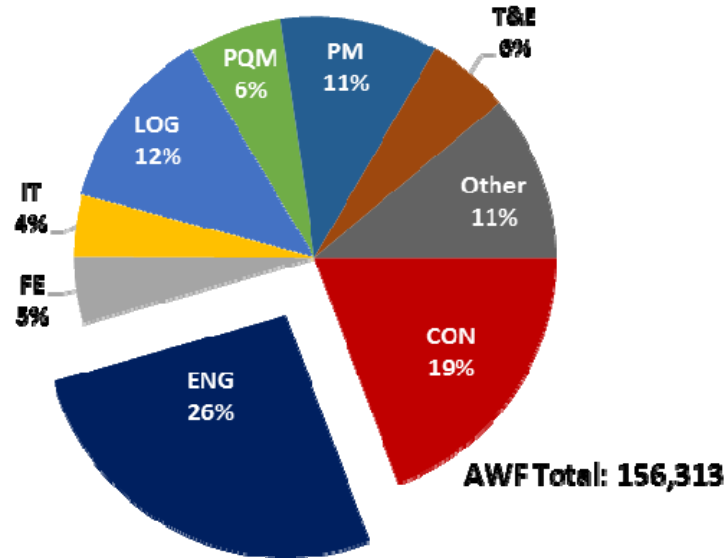
- The current Engineering Defense Acquisition Workforce DAWIA Meets/Exceeds certification rate is 82.1%; up from 64.3% in FY08
- The current Engineering Meets/Exceeds certification rate is up 17% from FY08
- The current Engineering Defense Acquisition Workforce DAWIA 24 month grace period rate is 16.3%; down from 20.5% in FY08
- The current Engineering Defense Acquisition Workforce DAWIA Does Not Meet certification rate is 2.5%; down from 15.2% in FY08

Defense Acquisition Workforce Retirement Eligibility Highlights

- Senior Career Group 46.3% (15,952) (10 years or less to retirement eligibility or retirement eligible)
- 15.7% (6,186) are currently eligible to retire, ↑ from 12.3% in FY08
- Mid Career Group 20.4% (8,042) (11 to 20 years to retirement), 24.1% in FY08
- Future Career Group 33.3% (13,106) (21 to 25+ years to retirement), ↑ from 26.6% in FY08



AWF by Component and Career Field



AWF Count by Career Category	Army	DoN	Air Force	4th Estate	Totals	% Total
FY15Q4						
Auditing				4,316	4,316	2.8%
Business - CE	244	570	454	78	1,346	0.9%
Business - FM	1,662	2,000	1,944	599	6,205	4.0%
Contracting	8,010	6,114	8,534	7,572	30,230	19.3%
Engineering	8,986	21,181	8,903	1,980	41,050	26.3%
Facilities Engineering	1,497	5,261	166	62	6,986	4.5%
Property	45	61	20	274	400	0.3%
Information Technology	1,682	2,765	1,133	822	6,402	4.1%
Life Cycle Logistics	7,201	6,160	3,028	2,833	19,222	12.3%
Production, Quality and Man	1,393	2,810	331	5,288	9,822	6.3%
Program Management	3,281	6,335	5,366	1,603	16,585	10.6%
Purchasing	272	495	79	484	1,330	0.9%
S&T Manager	393	484	2,674	130	3,681	2.4%
Test and Evaluation	1,956	3,328	3,027	381	8,692	5.6%
Unknow/Other	11	1	6	28	46	0.03%
FY15Q4 Totals (as of 09-30-2015)	36,633	57,565	35,665	26,450	156,313	
Component %	23.4%	36.8%	22.8%	16.9%		



Engineering Workforce Historical Size by Agency FY05 – FY15



Engineering	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	% Change Since FY08	% Change Since FY14
Defense Acq Workforce													
ARMY	11,138	11,964	11,050	10,769	10,208	10,644	10,108	9,810	9,419	8,981	8,986	-17%	0%
DoN	16,886	16,688	16,804	16,576	18,085	19,270	19,325	19,498	19,588	19,797	21,181	28%	7%
AIR FORCE													
DCMA	30	59	393	282	660	813	917	974	1,134	1,157	1,181	319%	2%
DLA	23	14	42	19	16	16	15	11	12	11	11	-42%	0%
DCAA	-	-	-	-	-	-	-	-	-	-	-	-	-
MDA	111	117	135	281	363	623	615	644	631	605	582	107%	-4%
DISA	4	16	96	89	74	58	69	69	76	74	70	-21%	-5%
DHA	-	-	2	2	8	9	9	10	8	6	2	0%	-67%
DTRA	11	1	1	7	11	27	17	35	45	44	43	514%	-2%
DAU	26	30	-	33	41	46	48	49	45	40	38	15%	-5%
OSD	18	15	16	31	19	25	24	21	29	23	24	-23%	4%
JCS	-	-	2	-	-	-	-	12	12	10	8	-	-20%
DeCA	-	-	-	-	-	-	-	-	-	-	-	-	-
WHS	-	-	-	-	-	-	-	-	-	-	-	-	-
DFAS	-	1	1	-	-	-	-	-	-	-	-	-	-
DoDEA	-	-	-	-	-	-	-	-	-	-	-	-	-
DMEA	-	-	-	-	-	29	26	23	23	20	20	-	0%
DoD HRA	-	-	1	-	-	-	-	-	-	-	-	-	-
TRMC	-	-	-	-	-	-	-	1	1	1	1	-	0%
DSCA	-	-	-	1	-	-	-	-	-	-	-	-100%	-
DMA	-	-	-	-	-	-	-	-	-	-	-	-	-
DSS	-	-	-	-	-	-	-	-	-	-	-	-	-
DTIC	-	-	-	1	-	-	-	-	-	-	-	-100%	-
DARPA	-	-	1	-	-	-	-	-	-	-	-	-	-
NDU	-	-	-	-	-	-	-	-	-	-	-	-	-
IG	-	-	-	1	-	-	-	-	-	-	-	-100%	-
ASD	-	-	-	-	4	4	3	1	-	-	-	-	-
PFPA	-	-	-	-	-	-	-	-	-	-	-	-	-
4th Estate Other	-	-	4	16	18	12	-	-	-	-	-	-100%	-
												↑	↑
TOTAL	34,752	35,142	34,710	34,537	36,704	39,201	39,690	39,807	39,544	39,242	41,050	18.9%	4.6%



President's FY16 Budget PB23 Projection FYDP Size (Civ + Mil) Projections



September 2015 Submission

<i>Civ + Mil</i>	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY15- FY21 Change	FY15- FY21 Chg %
Auditing	4203	4132	4048	3986	4056	4009	4022	(181)	-4.3%
Business, Cost Estimating, Financial Managem	7642	7714	7617	7465	7431	7436	7440	(202)	-2.6%
Contracting	29759	30231	30308	30197	30152	30138	30144	385	1.3%
Facilities Engineering	6683	6855	6878	6860	6861	6861	6861	178	2.7%
Industrial and Contract Property Management	367	411	405	403	403	403	403	36	9.8%
Information Technology	6012	6086	6012	5919	5915	5918	5918	(94)	-1.6%
Life Cycle Logistics	18288	18346	18156	17925	17882	17870	17869	(419)	-2.3%
Other	102	98	92	89	87	85	83	(19)	-18.6%
Production, Quality & Manufacturing	9101	9420	9450	9379	9364	9357	9349	248	2.7%
Program Management	16561	16950	16789	16575	16424	16386	16386	(175)	-1.1%
Purchasing	1510	1553	1543	1530	1526	1523	1520	10	0.7%
SPRDE - S&T Manager	3167	3298	3288	3286	3285	3285	3285	118	3.7%
Engineering	41321	41654	41477	41103	41026	41031	41031	(290)	-0.7%
Test and Evaluation	8698	8809	8771	8710	8713	8719	8719	21	0.2%
Grand Total	153414	155557	154834	153427	153125	153021	153030	(384)	-0.3%

Data Source: OSD CAPE SNAP Database;



President's FY16 Budget PB23 Projection FYDP Size (Civ + Mil) Projections



September 2015 Submission

Engineer Career Field Workforce Component/Agency	Resource Type	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY15-FY21 Change	FY15-FY21 Chg %
ARMY	Civilian FTE	9351	9,258	9,185	9,024	9,024	9,024	9,024	(327)	-3.5%
DAU	Civilian FTE	35	40	41	41	41	41	41	6	17.1%
DCMA	Civilian FTE	1057	1,056	1,039	1,019	1,019	1,019	1,019	(38)	-3.6%
DECA	Civilian FTE	1	1	1	1	1	1	1	-	0.0%
DHA	Civilian FTE	5	5	5	5	5	5	5	-	0.0%
DISA	Civilian FTE	91	93	96	100	105	111	111	20	22.0%
DLA	Civilian FTE	32	32	29	29	29	29	29	(3)	-9.4%
DTRA	Civilian FTE	16	16	16	16	16	16	16	-	0.0%
MDA	Civilian FTE	686	633	586	560	567	574	574	(112)	-16.3%
NAVY	Civilian FTE	20757	20,845	20,910	20,840	20,774	20,775	20,775	18	0.1%
USAF	Civilian FTE	7197	7,443	7,336	7,234	7,210	7,201	7,201	4	0.1%
USMC	Civilian FTE	361	354	354	354	354	354	354	(7)	-1.9%
ARMY	Military ES	1	3	3	3	3	3	3	2	200.0%
DISA	Military ES	2	2	2	2	2	2	2	-	0.0%
DLA	Military ES	5	5	5	5	5	5	5	-	0.0%
DTRA	Military ES	6	6	6	6	6	6	6	-	0.0%
MDA	Military ES	12	12	12	12	12	12	12	-	0.0%
NAVY	Military ES	213	213	214	214	214	214	214	1	0.5%
USAF	Military ES	1478	1,623	1,623	1,624	1,625	1,625	1,625	147	9.9%
USMC	Military ES	15	14	14	14	14	14	14	(1)	-6.7%
ALL CATEGORIES	Civilian FTE Total	39,589	39,776	39,598	39,223	39,145	39,150	39,150	(439)	-1.1%
ALL CATEGORIES	Military ES Total	1,732	1,878	1,879	1,880	1,881	1,881	1,881	149	8.6%
	ENGINEERING TOTAL	41,321	41,654	41,477	41,103	41,026	41,031	41,031	(290)	-0.7%
	Civ Change		187	(178)	(375)	(78)	5	-		
	Mil Change		146	1	1	1	0	-		
	ENGINEERING TOT Change		333	(177)	(375)	(78)	5	-		

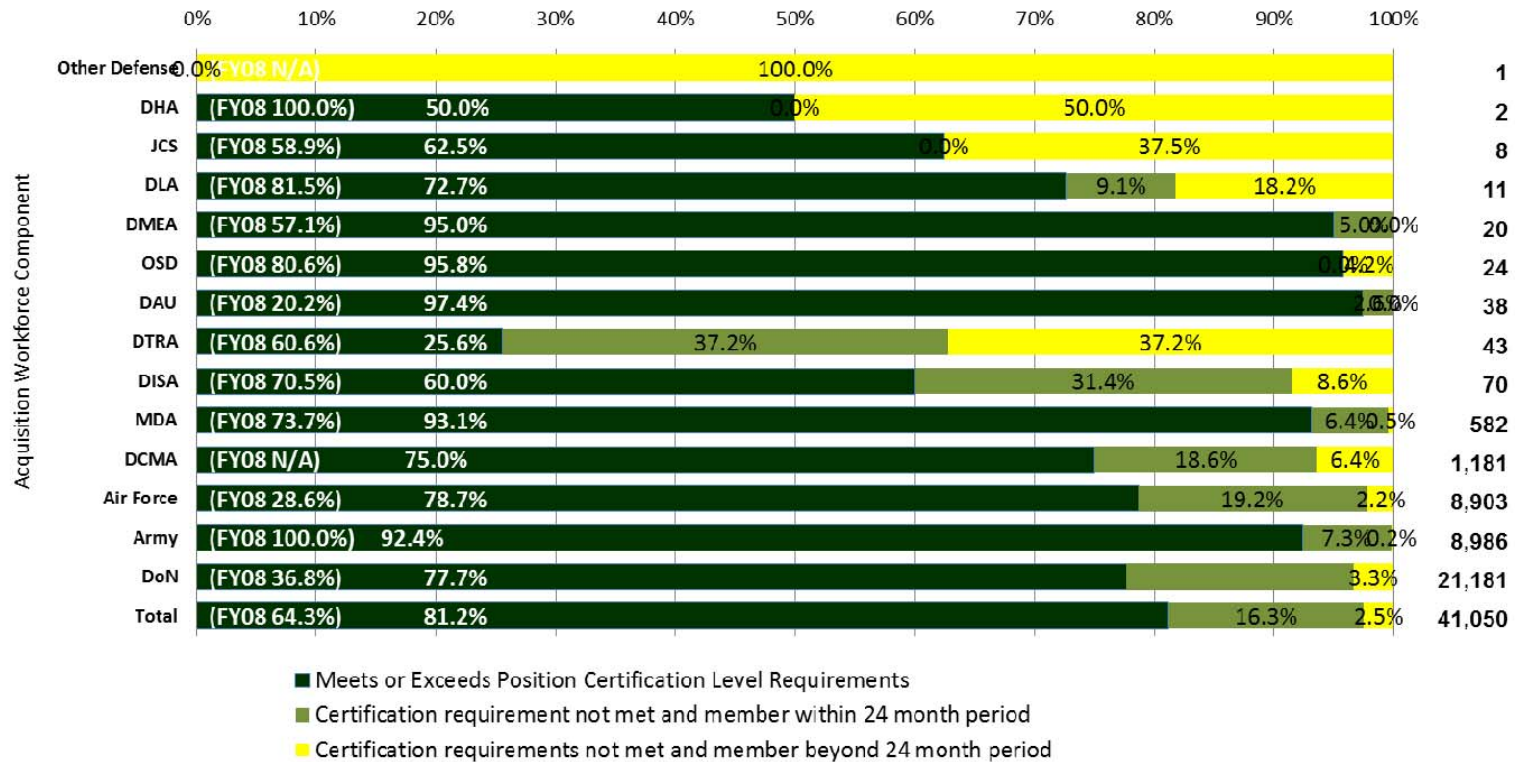
Data Source: OSD CAPE SNAP Database;



Engineering DAWIA Certification by Component



Certification Level "Meet/Exceed" Rates by Component Engineering (FY15)

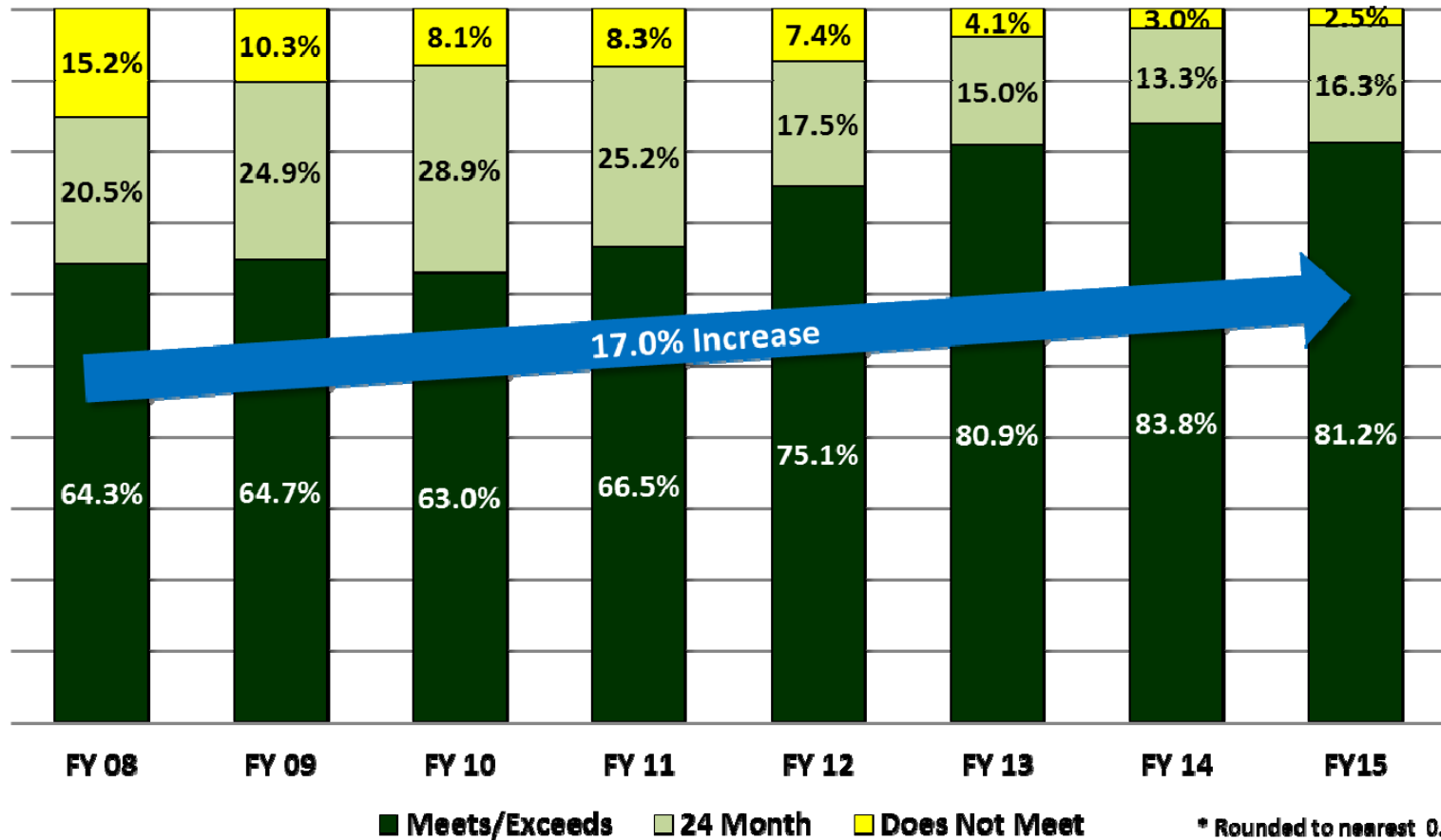




Engineering Historical DAWIA Certification FY08 – FY15Q2



Engineering





Engineering DAWIA Certification Matrix + Bench Strength

Engineering Required Certification Level	Achieved Certification Level				FY15Q4 TOTAL	% Meets Certification Requirement
	No Level Achieved	Level I	Level II	Level III		
Level I	2,129	2,326	593	223	5,271	59.6%
Level II	2,018	1,714	6,823	6,036	16,591	77.5%
Level III	676	347	822	17,334	19,179	90.4%
Unspecified	5	-	1	3	9	
FY15Q4 TOTAL	4,828	4,387	8,239	23,596	41,050	81.2%
	11.8%	10.7%	20.1%	57.5%		

No Level Achieved includes those within the 24 month grace period

Bench Strength			
Service	# Exceeds	% Exceeds**	Career Field Rank
DAW	20,177	12.9%	
Army	5,172	14.1%	
DoN	6,900	12.0%	
Air Force	6,543	18.4%	
4th Estate	1,562	5.9%	
Engineering	6,852	16.7%	2 of 13

** Based on population total without unspecified positions

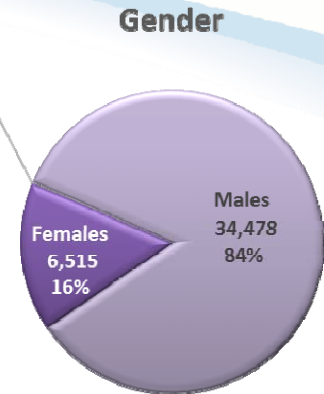
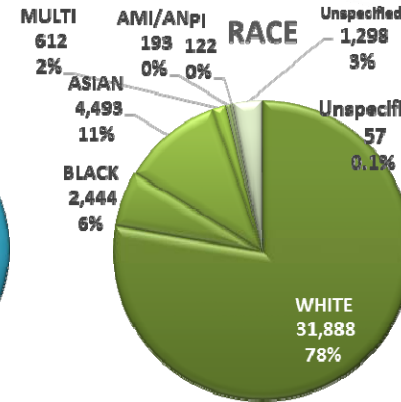
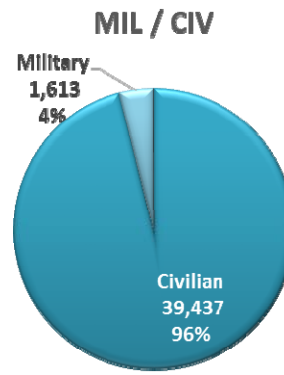
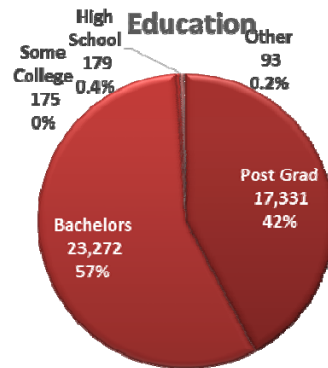
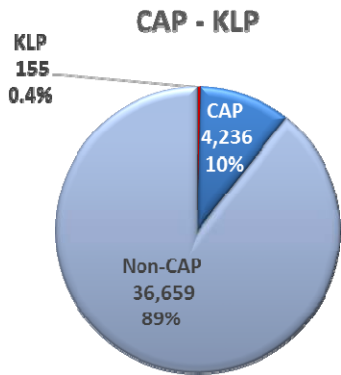
Certification Requirement	Meets	Within 24 Months	Does Not Meet	DAW TOTAL	
Level I	3,142	2,093	36	5,271	12.8%
Level II	12,859	3,206	526	16,591	40.4%
Level III	17,334	1,380	465	19,179	46.7%
Unspecified	3	4	2	9	0.0%
Engineering TOTAL	33,338	6,683	1,029	41,050	
	81.2%	16.3%	2.5%		

 = Compliance
 = Exceeds Requirements

* NOTE: Rounded to nearest 0.1%



Demographics



Occupied Position Type	Engineering TOTAL	Entire DAW
Key Leadership Positions (KLPs)	155 0.4%	1,089 0.7%
Critical Acquisition Positions (CAPs) *	4,236 10.3%	15,728 10.1%
Non-CAP Positions	36,659 89.3%	139,496 89.2%
TOTAL	41,050	156,313

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

Highest Level of Education	Engineering TOTAL	Entire DAW
Post Grad	17,331 42.2%	61,177 39.1%
Bachelors	23,272 56.7%	69,485 44.5%
Some College	175 0.4%	11,992 7.7%
High School	179 0.4%	12,667 8.1%
Other	93 0.2%	992 0.6%
TOTAL	41,050	156,313

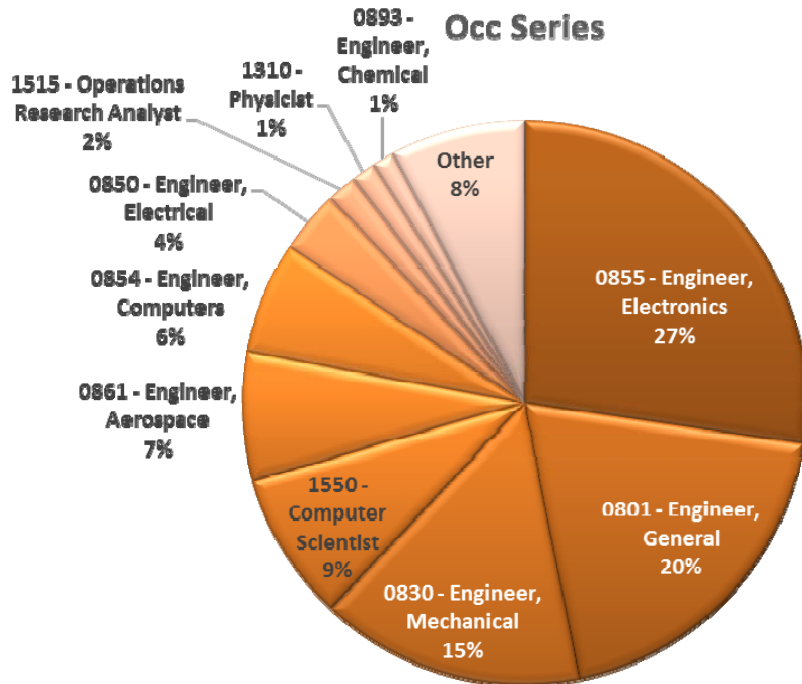
Military / Civilian	Engineering TOTAL	Entire DAW
Civilian	39,437 96.1%	140,962 90.2%
Military	1,613 3.9%	15,351 9.8%
TOTAL	41,050	156,313

Race	Engineering TOTAL	Entire DAW
WHITE	31,888 77.7%	117,023 74.9%
BLACK	2,444 6.0%	18,589 11.9%
ASIAN	4,493 10.9%	10,128 6.5%
MULTI	612 1.5%	3,274 2.1%
AMI/AN	193 0.5%	850 0.5%
PI	122 0.3%	722 0.5%
Unspecified	1,298 3.2%	5,727 3.7%
TOTAL	41,050	156,313

Gender	Engineering TOTAL	Entire DAW
Males	34,478 84.0%	110,309 70.6%
Females	6,515 15.9%	45,555 29.1%
Unspecified	57 0.1%	448 0.3%
TOTAL	41,050	156,312



Engineering Size by Occupational Series



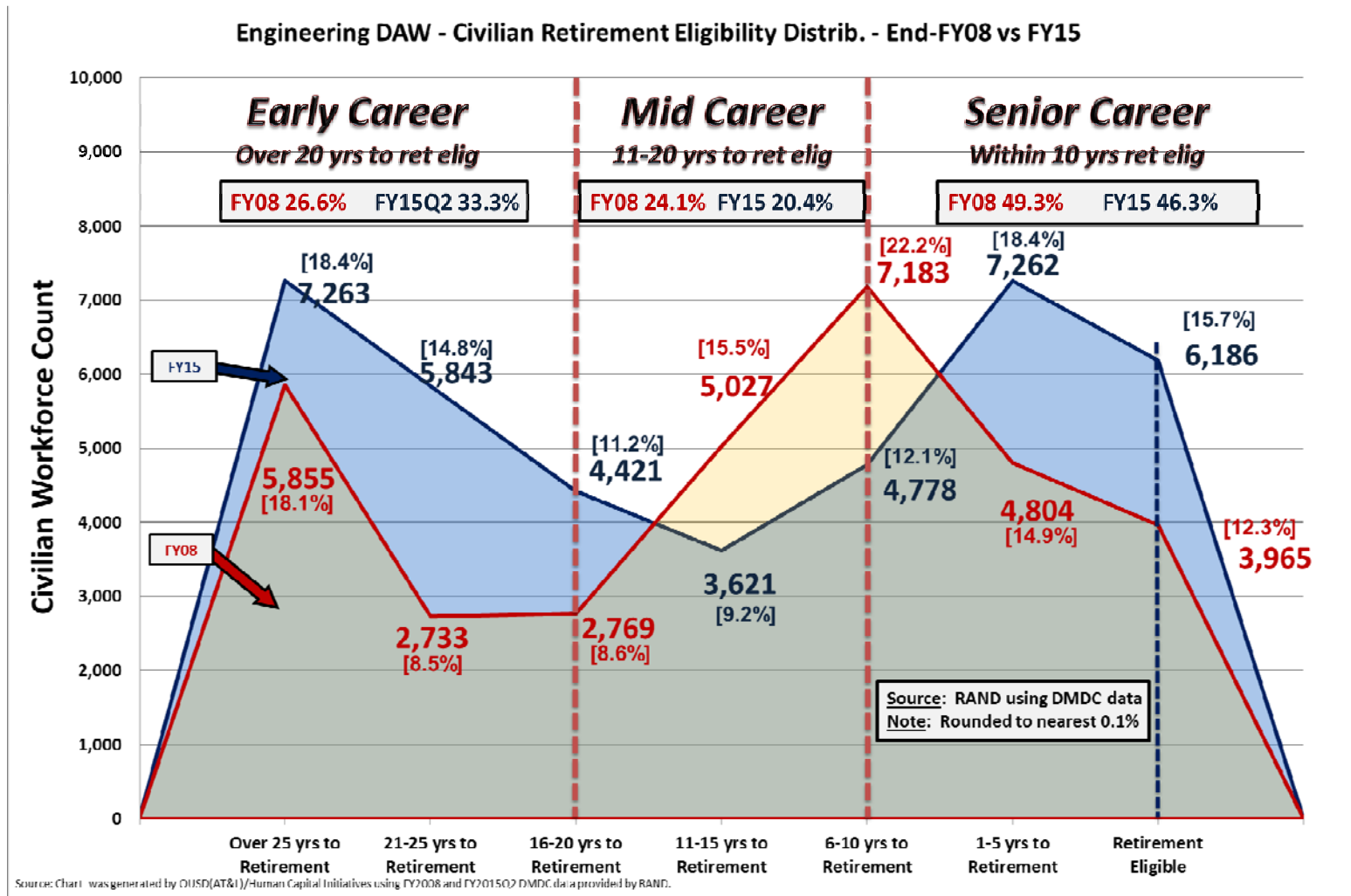
Civilian Occupational Series	Engineering TOTAL	
0855 - Engineer, Electronics	10,780	27.3%
0801 - Engineer, General	7,691	19.5%
0830 - Engineer, Mechanical	5,957	15.1%
1550 - Computer Scientist	3,406	8.64%
0861 - Engineer, Aerospace	2,908	7.37%
0854 - Engineer, Computers	2,508	6.36%
0850 - Engineer, Electrical	1,409	3.57%
1515 - Operations Research Analyst	662	1.68%
1310 - Physicist	558	1.41%
0893 - Engineer, Chemical	501	1.27%
Other	3,057	7.75%
TOTAL CIVILIAN	39,437	Civilians



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



Engineering Civilian Retirement Eligibility Distribution – FY08 / FY15

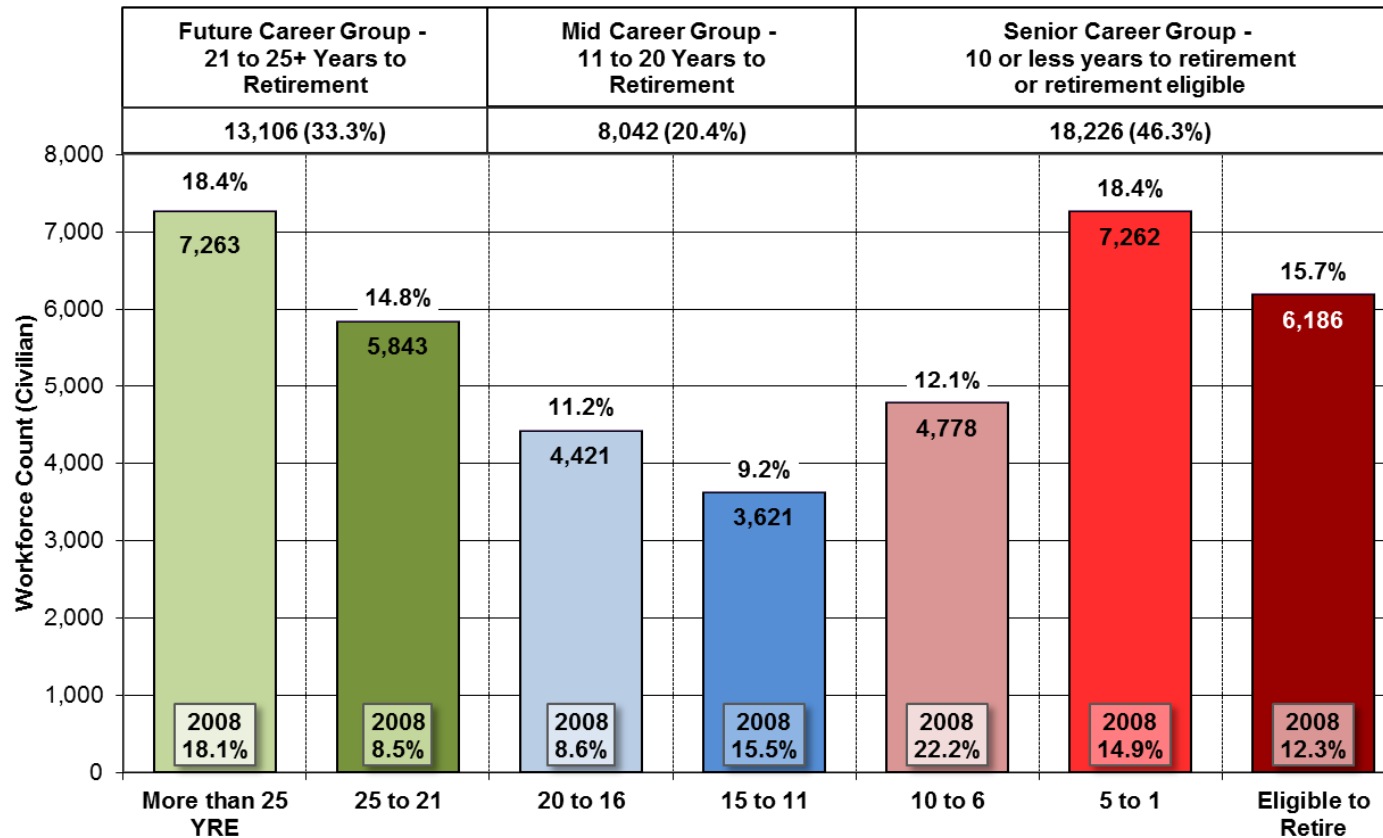


As of the end of FY15 (30 Sept 2014)



Engineering Workforce Lifecycle Model by YRE

Defense Acquisition Workforce Lifecycle Model (WLM)
by Years to Retirement Eligibility (YRE) - Civilian (FY 2015Q4) - Engineering



Source: Chart was generated by OUSD(AT&L)/Human Capital Initiatives using FY2008 (Q2) and FY2015 (Q4) DMDC data provided by RAND.

As of the end of FY15 (30 Sept 2015)

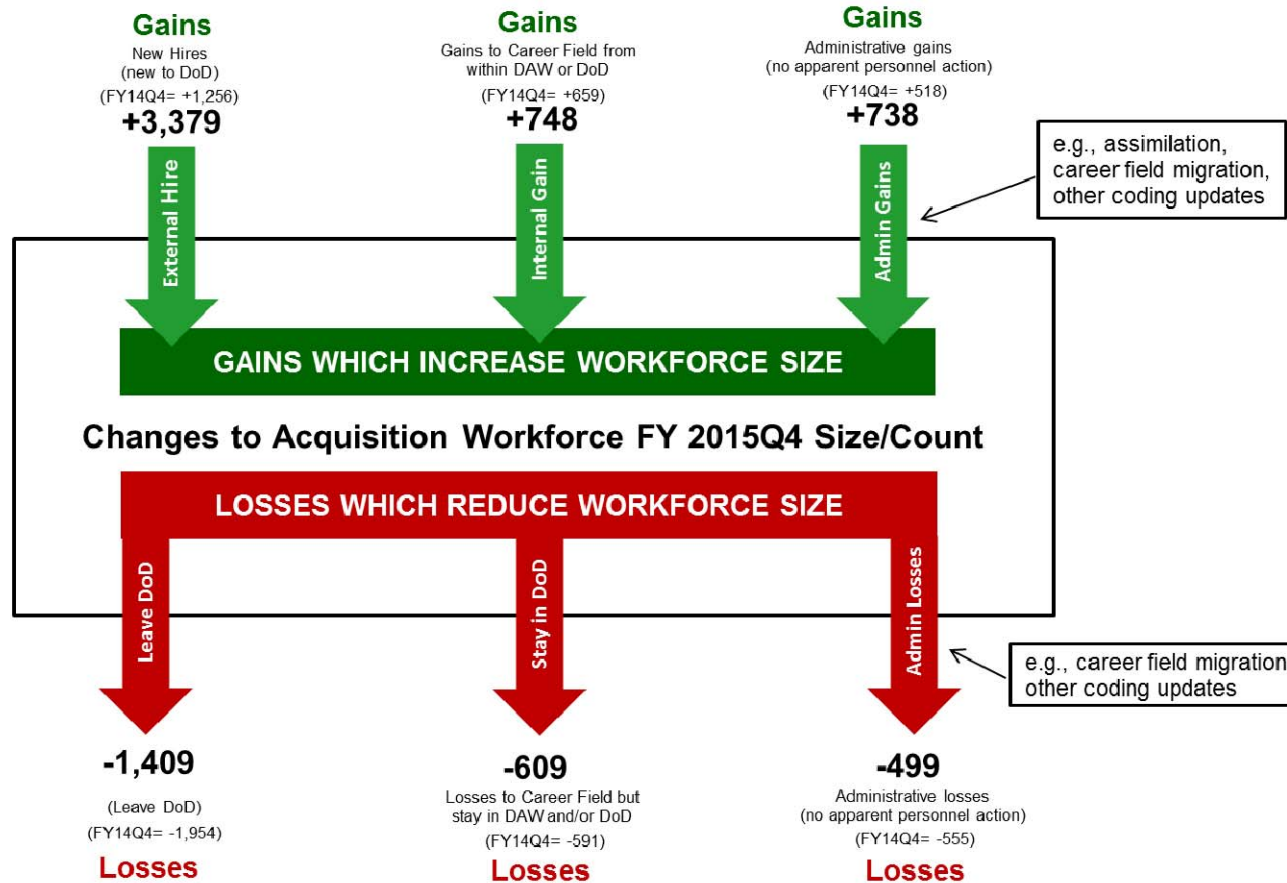


Engineering Gains/Losses – New Hires Internal/External, Administrative



Defense Acquisition Workforce (Civilian) (FY 2015Q4) - Engineering

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



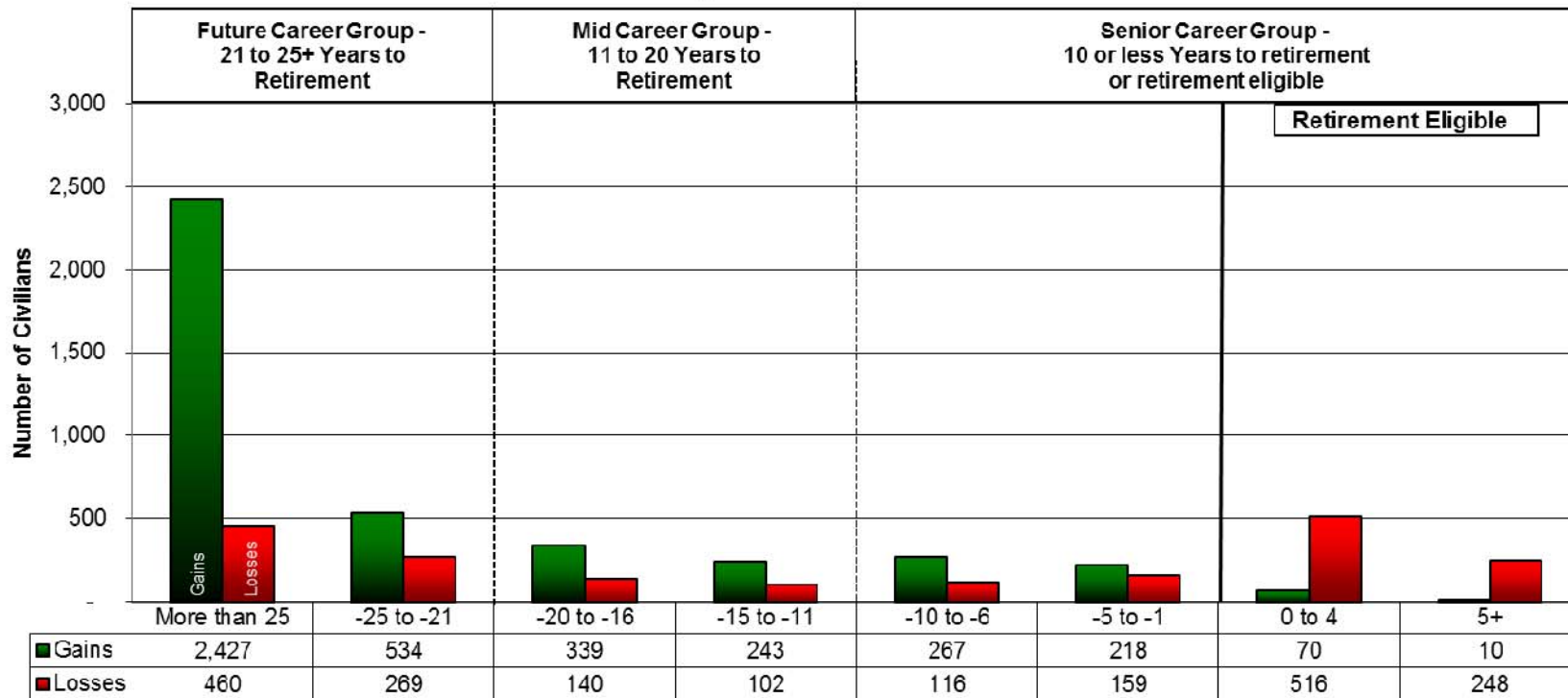
As of the end of FY15 (30 Sept 2015)



Engineering Gains and Losses by YRE Groups



Defense Acquisition Workforce (Civilian) - Engineering Workforce Lifecycle FY 2015Q4 Gains & Losses*



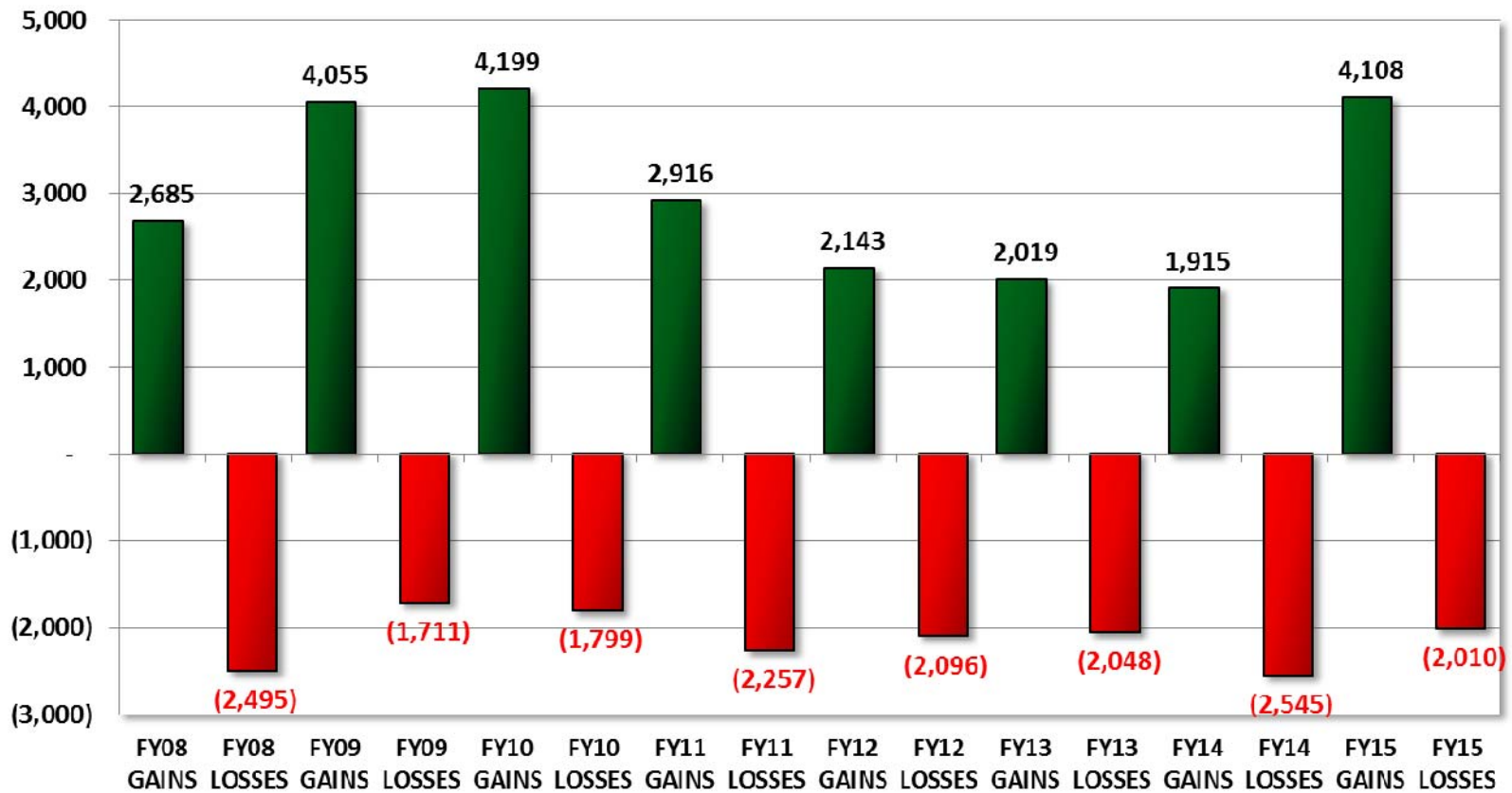
Career Lifecycle by Years to Retirement Eligibility

Source: RAND NDRI Forces and Resources Policy Center analysis using DMDC data (FY 2015Q4 and Previous FY Data)
*Does not include administrative gains and losses

As of the end of FY15 (30 Sept 2015)



Engineering Historical Gains and Losses FY08 – FY15



As of the end of FY15 (30 Sept 2015)

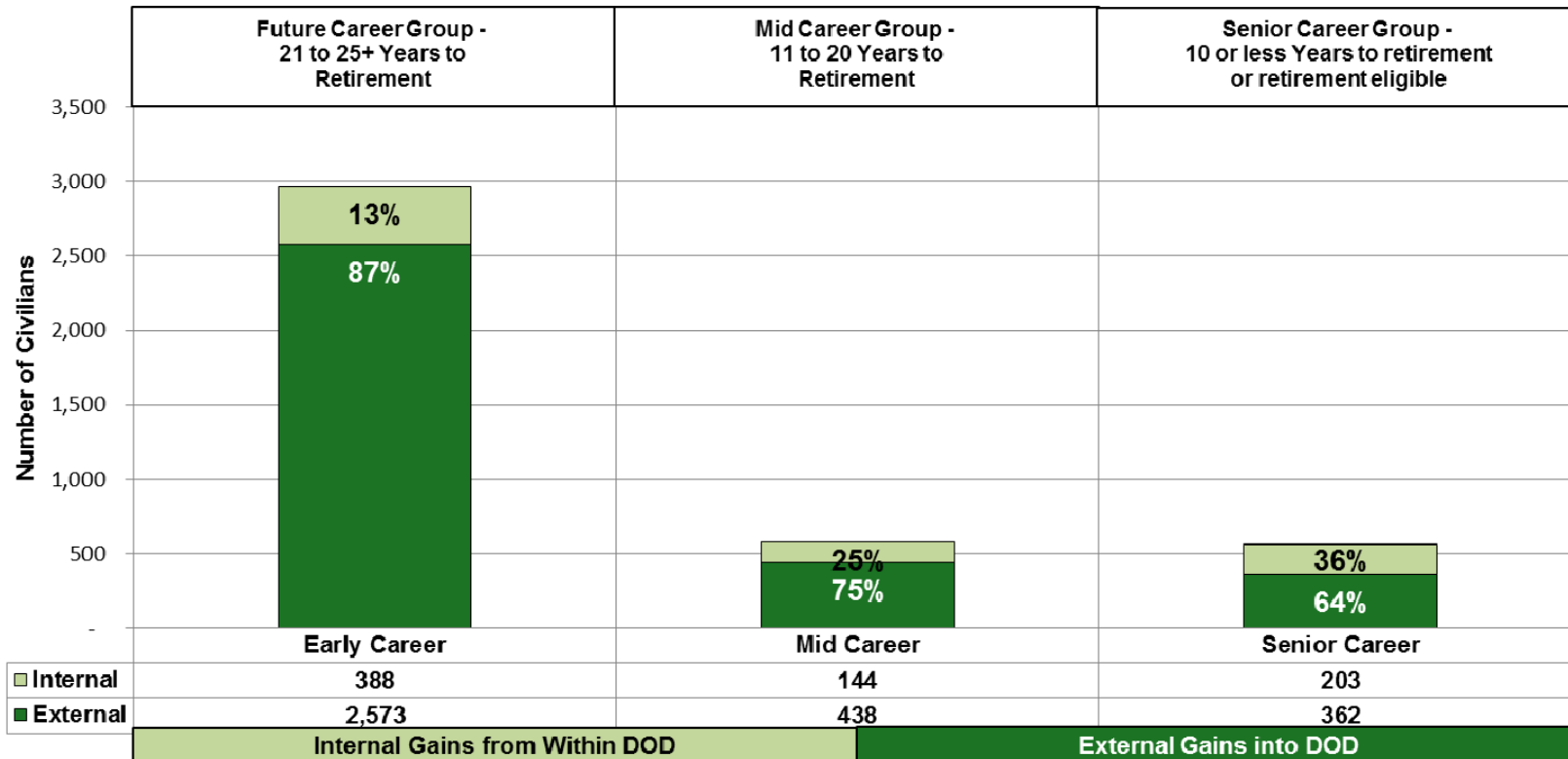


Engineering Internal/External Gains % by Career Group



Defense Acquisition Workforce (Civilian) - Engineering

Workforce Lifecycle FY 2015Q4 Gains*



Source: RAND NDRI Forces and Resources Policy Center analysis using DMDC data (FY 2015Q4 and Previous FY Data)

*Does not include administrative gains

As of the end of FY15 (30 Sept 2015)

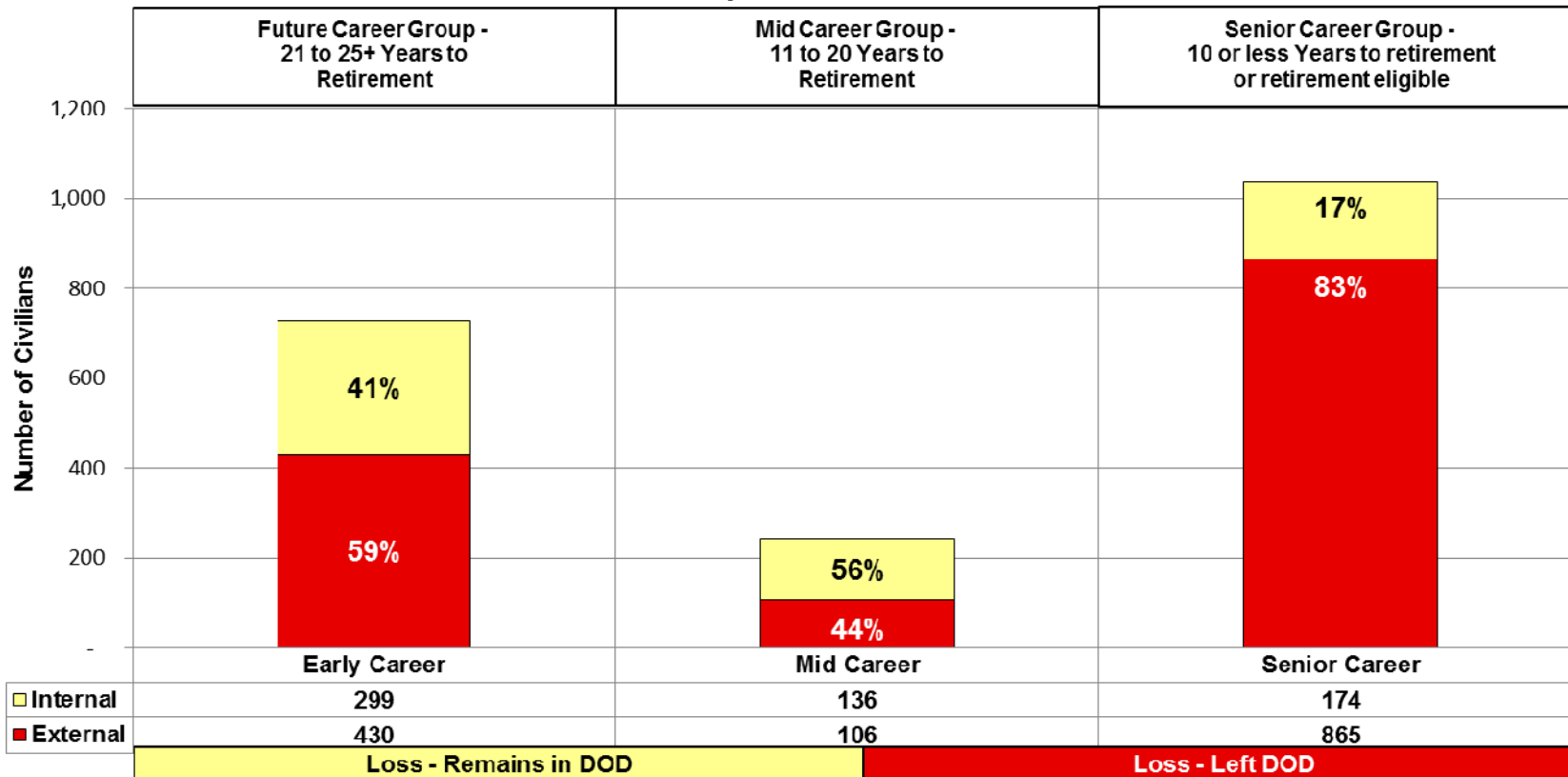


Engineering Internal/External Loss % by Career Group



Defense Acquisition Workforce (Civilian) - Engineering

Workforce Lifecycle FY 2015Q4 Losses*



Source: RAND NDRI Forces and Resources Policy Center analysis using DMDC data (FY 2015Q4 and Previous FY Data)

*Does not include administrative losses

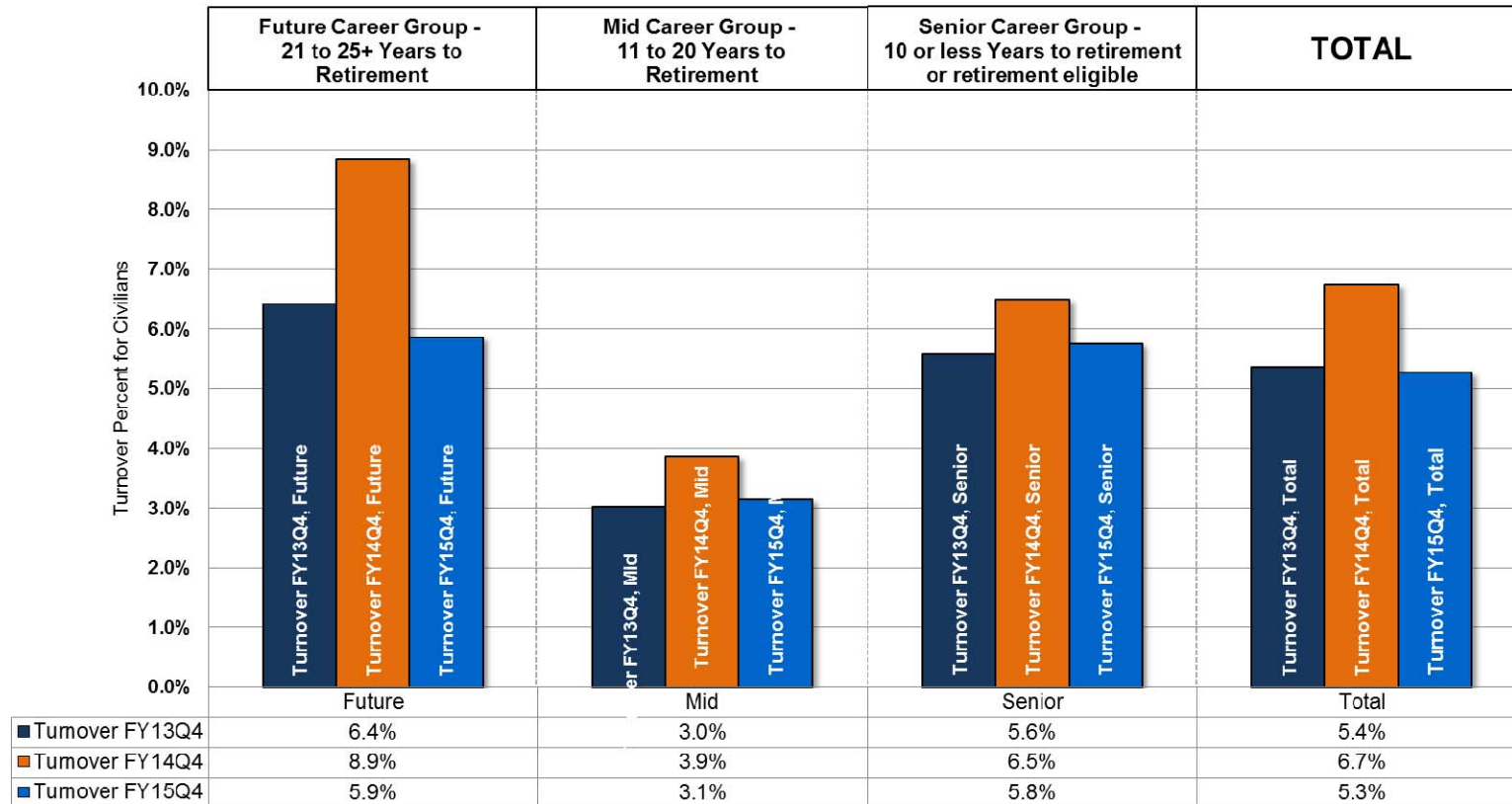
As of the end of FY14 (30 September 2014)



Engineering Turnover Rates by Career Group



Defense Acquisition Workforce Turnover - Engineering (Civilian) (FY13Q4, FY14Q4, FY15Q4)(by Career Lifecycle Group)



Turnover Percent by Career Lifecycle Groups

As of the end of FY15 (30 Sept 2015)

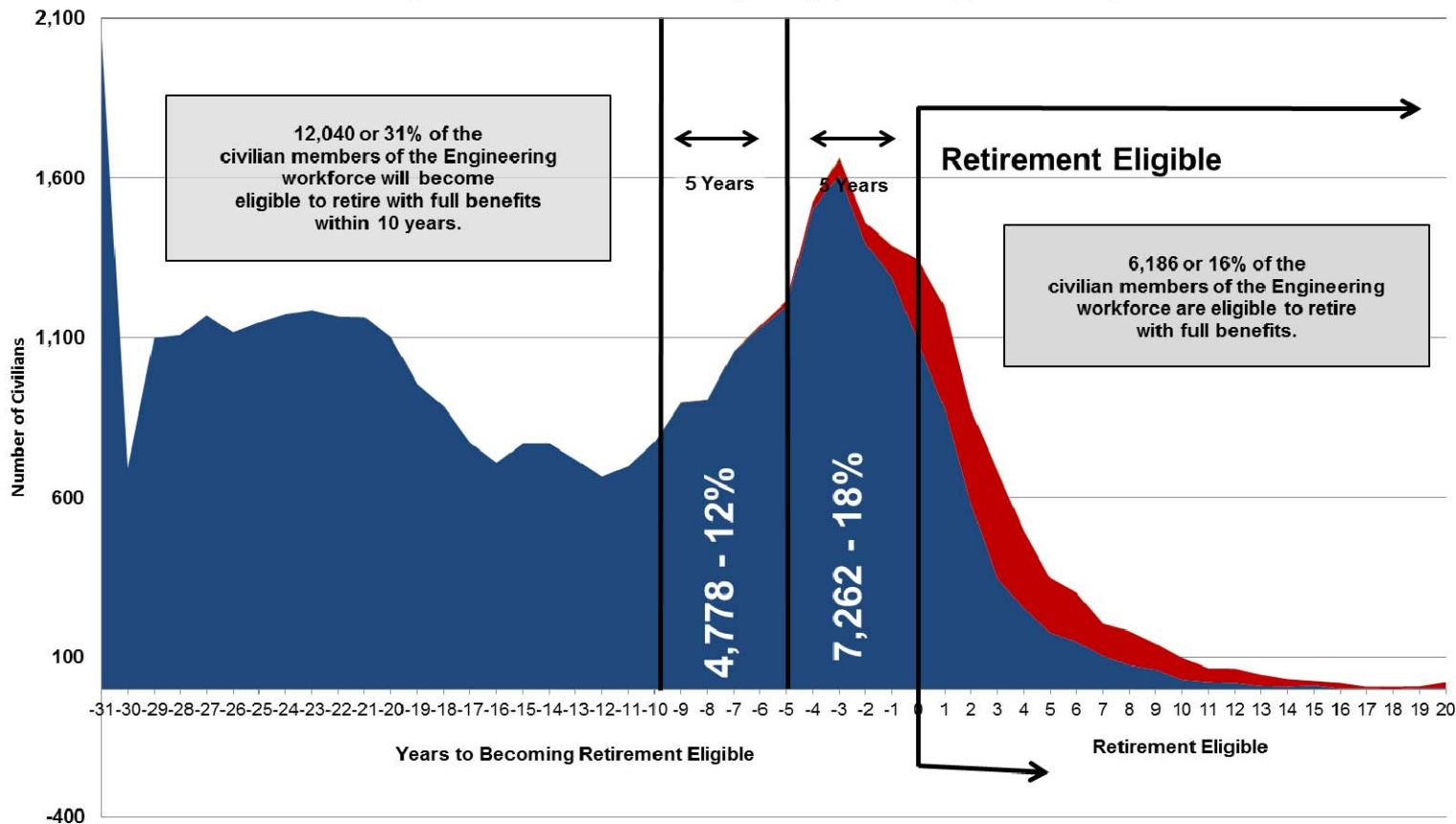


Engineering Civilian Distribution by Years to Retirement Eligibility



Defense Acquisition Workforce - Engineering

Distribution by Years to Retirement Eligibility (Civilians)(FY 2015Q4)



As of the end of FY15 (30 Sept 2015)



END