

November 6, 2018

LOS ANGELES FIRE DEPARTMENT



RALPH M. TERRAZAS
FIRE CHIEF

October 22, 2018

BOARD OF FIRE COMMISSIONERS
FILE NO. 18-125

TO: Board of Fire Commissioners

FROM:  Ralph M. Terrazas, Fire Chief

SUBJECT: LOS ANGELES FIRE DEPARTMENT (LAFD) RECRUIT TRAINING
ACADEMY OVERVIEW

FINAL ACTION:	<input type="checkbox"/> Approved	<input type="checkbox"/> Approved w/Corrections	<input type="checkbox"/> Withdrawn
	<input type="checkbox"/> Denied	<input type="checkbox"/> Received & Filed	<input type="checkbox"/> Other

SUMMARY

As directed by the LAFD Board of Fire Commissioners (Commission), the Fire Department is providing an update relative to information specific to the diversity and retention rates within the Recruit Training Academy (Academy). A report was requested that reflects the data from the time Recruit Firefighters enter the Academy through the end of probation.

Utilizing the data parameters and timelines as requested by the Commission, the Fire Department organized, assessed, and analyzed the information along with the outcomes.

RECOMMENDATION

That the Board:
Receive and file.

DISCUSSION

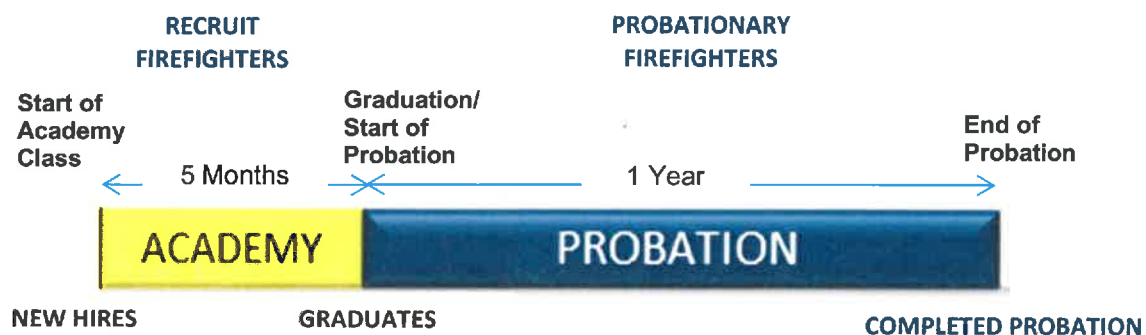
In accordance with the Commission's request and the 2017 LAFD Recruit Training Academy Overview Report (2017 Academy Report), ethnic/gender composition and retention rates from the start of the Academy through the end of probation were measured and analyzed.

The data timelines are being presented in three specific areas as requested and are defined to ensure consistency and uniform application throughout the report. Additionally, the data fields are being presented for future Academy Classes to ensure the expectation is clear relative to data maturation timelines for future reports.

The data parameters include the following:

- **New Hires** – The number of brand new Recruit Firefighters (Recruits) for an Academy.
- **Graduates** – Refers to Recruits who successfully completed the Academy curriculum.
- **Completed Probation** – Refers to Probationary Firefighters (PFF) who have successfully completed 365 days of probation and their field internship.

The timeline to obtain a full data set from one Academy Class, which includes all three of the aforementioned categories as requested by the Commission, is approximately one year and five months for the data to mature. Please note that beginning Fiscal Year 2018-19, the duration of the Academy was extended from 20 weeks to 22 weeks, which will still be referred to as five months in this report. The subsequent field probationary period required for Recruit Firefighters to successfully complete the Academy remains at one full year, or 365 days. The following chart demonstrates the timeline as it relates to the defined terminology and the stages of a newly hired Firefighter.



This report has been divided into four sections. Three segments provide context and a baseline for the success of the current process and are defined as follows:

- **End Status of Academy Classes (End Status)** – Includes all data fields; New Hires, Graduates, and Completed Probation.
- **Ongoing Recruit Status of Academy Classes on Probation (Ongoing Status)** - Includes two data fields. New Hires and Graduates. These Classes have not Completed Probation.
- **Current Recruit Academy Class Status (Current Class Status)** - Includes one data field. The New Hires are currently assigned to the Academy.

The fourth portion of the report provides an **Overall Analysis** of the information including an appraisal and examination of the 2018/2019 Action Plan Goals from the 2017 Academy Report.

1. END STATUS OF ACADEMY CLASSES

This section assesses Academy Class statistics which contains mature data from the time the Recruits entered the Academy through the end of probation. The corresponding Start, Graduation, and Probationary End dates for each Academy Class are included below. Six additional Academy Classes (highlighted light blue below) have completed the probationary period since the 2017 Academy Report.

	Academy Class	Academy Start Date	Graduation Date	Probation End Date	Fiscal Year
1	2014-1	12/29/2014	05/14/2015	05/16/2016	FY 14/15
2	2014-2	04/06/2015	08/20/2015	08/22/2016	FY 14/15
3	2015-1	07/13/2015	11/24/2015	11/28/2016	FY 15/16
4	2015-2	09/21/2015	02/04/2016	02/06/2017	FY 15/16
5	2015-3	12/14/2015	04/28/2016	05/01/2017	FY 15/16
6	2015-4A	02/08/2016	06/09/2016	06/12/2017	FY 15/16
7	2015-5	05/16/2016	09/28/2016	10/02/2017	FY 15/16
8	2015-6	06/27/2016	11/09/2016	11/13/2017	FY 15/16
9	2016-1	10/17/2016	03/02/2017	03/05/2018	FY 16/17
10	2016-2	11/28/2016	04/13/2017	04/16/2018	FY 16/17
11	2016-3	03/20/2017	08/03/2017	08/06/2018	FY 16/17
12	2016-4	05/01/2017	09/14/2017	09/17/2018	FY 16/17

The following tables and charts list the number of New Hires, Graduates, and Probationary members that Completed Probation, and corresponding retention rates for each stage assessed by gender, ethnicity, and as a whole.

End Status Recruit Classes 2017					
Academy Class	New Hires	Academy Retention	Graduates	Probationary Retention	Completed Probation
2014-1	40	73%	29	100%	29
2014-2	52	83%	43	98%	42
2015-1	60	87%	52	98%	51
2015-2	51	88%	45	98%	44
2015-3	67	72%	48	98%	47
2015-4A	52	87%	45	100%	45
Total	322	81% *	262	98% **	258
*Average Attrition in the Academy – 19% **Average Attrition during Probation – 2%					

End Status Recruit Classes 2018					
Academy Class	New Hires	Academy Retention	Graduates	Probationary Retention	Completed Probation
2015-5	60	82%	49	94%	46
2015-6	47	89%	42	98%	41
2016-1	65	69%	45	98%	44
2016-2	49	94%	46	98%	45
2016-3	63	86%	54	98%	53
2016-4	53	85%	45	93%	42
Total	337	83% *	281	96% **	271
*Average Attrition in the Academy – 17% **Average Attrition during Probation – 4%					
Aggregate End Status Recruit Classes 2017/2018					
Aggregate Totals	658	83%	543	97%	529

1.1. Gender – End Status of Academy Classes

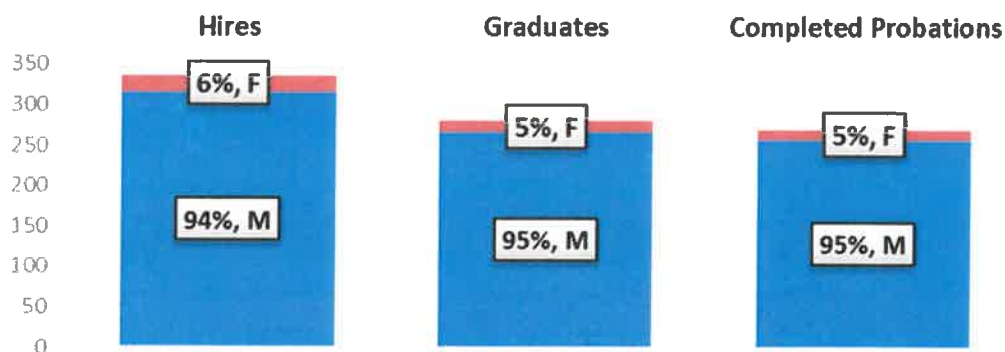
Aggregate 12 Classes from 2014-1 to 2016-4

Gender	New Hires	Academy Retention	Graduates	Probationary Retention	Completed Probation
Female	41	63%	26	96%	25
Male	618	84%	517	97%	504
Total	659	82%	543	97%	529

1.1.1. End Status Recruit Classes 2018: Six Classes from 2015-5 to 2016-4

Gender	New Hires	Academy Retention	Graduates	Probationary Retention	Completed Probation
Female	20	70%	14	93%	13
Male	317	84%	267	97%	258
Total	337	83%	281	96%	271

PAST YEAR GENDER REPRESENTATION OF END STATE CLASSES:
6 CLASSES, 15-5 to 16-4



1.2. Ethnicity – End Status of Academy Classes

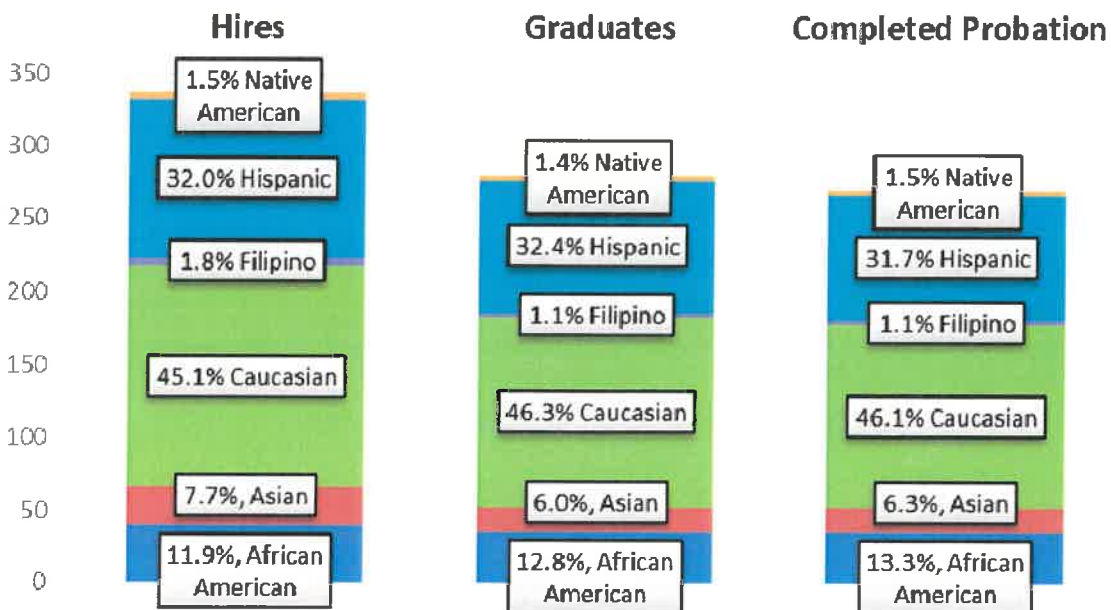
1.2.1. Aggregate Ethnic Representation of 12 Classes from 2014-1 to 2016-4

Ethnicity	New Hires	Academy Retention	Graduates	Probationary Retention	Completed Probation
African American	64	81%	52	100%	52
Asian	46	70%	32	97%	31
Caucasian	315	83%	272	98%	266
Filipino	15	60%	9	100%	9
Hispanic	207	85%	176	96%	169
Native American	4	50%	2	100%	2
Total	659	82%	543	99%	529

1.2.2. End Status Academy Classes 2018, 6 Classes from 2015-5 to 2016-4

Ethnicity	New Hires	Academy Retention	Graduates	Probationary Retention	Completed Probation
African American	40	90%	36	100%	36
Asian	26	65%	17	100%	17
Caucasian	152	86%	130	96%	125
Filipino	6	50%	3	100%	3
Hispanic	108	84%	91	95%	86
Native American	5	80%	4	100%	4
Total	337	83%	281	96%	271

ETHNIC REPRESENTATION END STATE - 6 CLASSES, 15-5 TO 16-4



1.3 Analysis – End Status of Academy Classes

The End Status Report includes all data fields as requested by the Commission which allow for the tracking of Recruits from entry into the Academy through the end of probation.

The aggregate retention rate for women that graduated from the Training Academy is 63% which is a 6% net gain since the previous reporting period. The aggregate probationary retention rate remained high at an average of 97%. Additionally, the Academy retention rate from the last reporting period to current has increased by 2% (i.e., 81% to 83%). The positive trends are attributed to the front-end recruitment phase, increased education during the selection process, and ensuring the physical requirements to be successful in the Academy are well known by candidates.

In analyzing ethnic representation, the diversity of Recruits who graduated and completed probation do not deviate largely from the composition of Recruits who were initially hired. The general consistency in ethnic representation from the point of entry into the training process through the end of Probation reflects well on new hire diversity.

The charts also reflect that the distribution of ethnicity through the end of probation improves for some groups. African American representation at End State was previously 8% for Class 2014-1 to 2015-4. This percentage increased to 13.3% for the set of Classes that reached the End Status (completed probation) in the past year (Class 2015-5 to 2016-4). The two smallest populations are Native American and Asian/Filipino collectively. It should be noted that Asians/Filipinos, African Americans and Native Americans all have a 100% probationary retention rate for this reporting period.

Of the Aggregate 543 Graduates who advanced to probation, 14 PFF's (2.6%) did not complete the probationary period for all 12 Classes. Four of the probationary separations occurred and were addressed in the 2017 Academy Report and ten occurred during this reporting period. The overall Probationary Retention rate has slightly decreased.

The reasons a PFF does not complete probation vary and are listed in this section. The probationary retention rate is 96% for the current reporting period and the aggregate retention rate is 97%. The Department considers this measure to be highly favorable and indicates that the Academy is executing the Recruit training mission at a very high level of proficiency.

However, it should be noted that only one probationary separation was due to performance issues which brings the overall rate of completing probation to 99.6% and indicates that the Academy, specific to the Training environment, is far above the norm.

As can be ascertained by the table below; of the remaining separations, four were due to being hired by other fire agencies and others due to outlier personal issues or unknown reasons. The low number (1) of performance related separations for a probationary Recruit is a clear indicator that when Recruits graduate from the Academy, they are prepared and ready for the rigors and demands of the Firefighter position in the field.

End Status – Probationary Separations Recruit Classes 2018				
	Probationary Firefighters	Recruit Class	Resign/ Terminated	Reason
1	Male Caucasian	2015-5	Terminated	Performance
2	Male Hispanic	2015-5	Resigned	In lieu of (Misconduct)
3	Male Caucasian	2015-5	Resigned	Unknown
4	Male Hispanic	2015-6	Resigned	Left for Other Employment – LA County Fire Department
5	Male Caucasian	2016-1	Resigned	Unknown
6	Male Caucasian	2016-2	Resigned	Left for Other Employment – Ontario Airport
7	Female Hispanic	2016-3	Resigned	Left for Other Employment – Cal Fire Department
8	Male Hispanic	2016-4	Resigned	Left for Other Employment – Sac-Metro Fire
9	Male Hispanic	2016-4	Resigned	In lieu of (Misconduct)
10	Male Caucasian	2016-4	Resigned	Unknown

2. ONGOING STATUS OF ACADEMY CLASSES ON PROBATION

This section discusses Academy Classes for which two of the three data fields, New Hires and Graduates, are available. On an aggregate level, 15 total Classes have graduated since the time of the 2017 Academy Report. Two of the Classes also completed probation and were discussed in the End Status Report. These Classes (highlighted in blue) are still captured in this section in order to be inclusive of all Graduate activity. There are currently three ongoing Academy Classes which have surpassed the Graduation point and are still progressing through the probationary period. The full data set for these Academy Classes will not be available until each group reaches the Probation End Dates identified below:

No. of Classes	Academy Class	Academy Start Date	Graduation Date	Probation End Date	Fiscal Year
1	2016-3	03/20/17	08/03/17	08/06/18	FY 16/17
2	2016-4	05/01/17	09/14/17	09/17/18	FY 16/17
3	2017-1	08/21/17	01/04/18	01/07/19	FY 17/18
4	2017-2	01/22/18	06/07/18	06/10/19	FY 17/18
5	2017-3	02/19/18	07/19/18	07/22/19	FY 17/18

The following tables and charts provide the number of Hires, Graduates, and corresponding retention rates for each of the five Academy Classes broken down by gender and ethnicity at graduation. Gender and Ethnicity retention rates are also included for the same two data fields which provide a more refined pathway to analysis and comparison.

Academy Class	New Hires	Academy Retention	Graduates
2016-3	63	86%	54
2016-4	53	85%	45
2017-1	59	88%	52
2017-2	48	98%	47
2017-3	66	73%	48
Total	289	85% **	246
**Average attrition in the Academy – 15%			

2.1. Gender – Ongoing Academy Status Graduated Classes: 2016-3 to 2017-3

Gender	New Hires	Academy Retention	Graduates
Female	27	59%	16
Male	262	88%	230
Total	289	85%	246

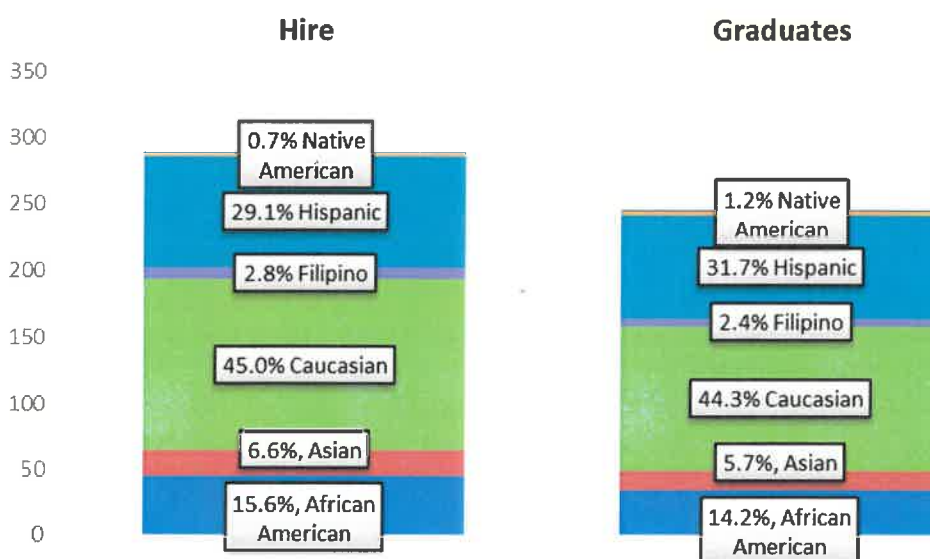
GENDER COMPOSITION OF CLASSES GRADUATED IN PAST YEAR



2.2. Ethnicity – Ongoing Academy Status Graduated Classes: 2016-3 to 2017-3

Ethnicity	New Hires	Academy Retention	Graduates
African American	45	80%	36
Asian	19	74%	14
Caucasian	130	84%	108
Filipino	8	75%	6
Hispanic	84	93%	78
Native American	2	100%	3
Unspecified Ethnicity	1	100%	1
Total	289	85%	246

ETHNIC COMPOSITION OF CLASSES GRADUATED IN PAST YEAR



2.3. Analysis – Ongoing Status

The Ongoing Status section focuses on two of the three data fields; New Hires and Graduates. As discussed previously, two of the Classes (2016-3 and 2016-4) already completed probation and are included in this discussion. These two Classes yielded 99 Graduates/PFF's. A total of 95 completed probation and moved on to the full Firefighter position in the field.

The remaining three Classes, 2017-1, 2017-2, and 2017-3, are set to complete probation within the next 10 months. A total of 143 Recruits graduated from these Classes and moved on to the field internship.

The following information reflects an assessment of the statistics/data outcomes for the five Recruit Classes (2016-3 to 2017-3) identified in this section of the report:

- Female representation equaled 7% of total Graduates, an increase of 2.6% from the previous reporting period of 4.4%.
- Female representation totaled 9% of New Hires which is a 50% increase since the 2017 Academy Report at 6%.
- Out of the 11 female Recruits who did not graduate, a total of four are still eligible for graduation. Three are currently in the Training Academy Class and one is awaiting re-assignment into the Academy.
- Similar to the data analyzed in the End Status Reporting section, the ethnic composition of Hires and Graduates remains relatively consistent through graduation which reflects well on the diversity among Recruits in the Academy.

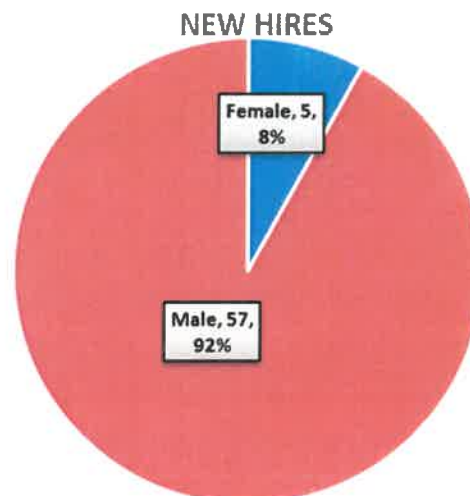
3. CURRENT ACADEMY CLASSES

There is currently one Academy Class in session, Class 2018-1. The data for this Class is scheduled to fully mature in December 2019. Graduation is scheduled for December 2018 and retention statistics will be reported in the 2019 Academy Overview Report during Fiscal Year 2019/20.

Academy Class	Academy Start Date	Graduation Date	Probation End Date	Fiscal Year
2018-1	7/23/2018	12/20/2018	12/20/2019	FY 18/19

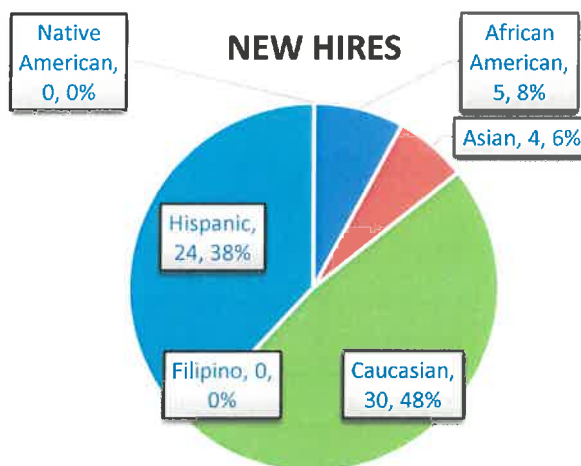
3.1. Gender – Current Status

Gender	New Hires
Female	5
Male	57
Total	62



3.2. Ethnicity – Current Status

Ethnicity	New Hires
African American	5
Asian/Filipino	4
Caucasian	29
Hispanic	24
Native American	0
Total	62



3.3. Analysis – Current Status

This section provides a snapshot of one Recruit Class currently in session. The Class is progressing well and is in alignment with the incremental improvements demonstrated by the data presented in this report.

According to the Board Report (BFC 18-086) “Quarterly Fire Department Diversity Reports,” dated August 21, 2018, the female population of the LAFD comprises 3.20% of uniform members. By comparison, the current Recruit Class represents 8% of New Hires which is more than double the current female population of the LAFD.

4. OVERALL ANALYSIS

The Academy is one of sixteen Accredited Local Academies (ALA) as established by the Office of State Fire Marshal in California. The ALA status allows the Department to certify its newest members as Firefighter I's which is in educational and training alignment with the State of California along with national organizations; International Fire Service Accreditation Congress (IFSAC) and Pro-Board Fire Service Professional Qualifications System (Pro Board). To date, the Department has certified over 900 members as Firefighter I. This achievement is in alignment with the LAFD Strategic Plan, Goal 5, Strategy 4; Align Drill Tower Academy with State Firefighter I Certification. The accomplishment also provides a pathway to achieving Strategic Plan Benchmark Strategy 4; Align LAFD training programs with California State Firefighter Certification tracks, which will help provide pathways for higher education and professional development.

The Academy is currently comprised of 22 weeks of academic and manipulative instruction. The program is divided in two parts which include Basic Instruction and Advanced Application Training. The Basic Instruction (week 1-12) teaches the Recruits the basic skills of personal protective equipment, ladders, hose lays, tools and equipment, and emergency medical skills.

The Advanced Training (week 13-20) mirrors field activities in scope and intensity to challenge the Recruits' thought process in coalescing the single layer activities learned in the Basic Instruction portion and utilizing these skills under simulated fire ground conditions. During the Advanced Training there is also a demonstration of strength and stamina which is necessary for Recruits to perform at a basic Firefighter level in the field. The last two weeks of the Academy focuses on the comprehensive examinations for State Certification.

4.1. Gender and Ethnicity

The statistics presented at the End, Ongoing, and Current level reflect a trend in increased female representation. This indicates that targeted marketing efforts of the Recruitment campaign along with the Candidate Advancement Program (CAP), Functional Movement Screening (FMS), and Training Academy benchmarks have all had a positive impact. The increased insight and analysis into challenges within the Training Academy has resulted in more refined methods of candidate preparation and a steady progression throughout the Training Academy and the probationary period.

In reviewing and analyzing the data, it was evident that Training Academy retention rates were lower for Asians and Filipinos which can be attributed to a smaller sample size i.e., four Recruits enter an Academy Class and one is unsuccessful: 75% retention rate, two unsuccessful, 50% retention rate and so on. Smaller sample sizes can also have the same effect on females as one deviation can adversely impact the retention rates of such small groups. Conversely, Caucasians and Hispanics are among the highest in retention rates, but have the largest sample sizes wherein if one or two Recruit Firefighters in these categories are unsuccessful, the change in the retention rate is not as significant as in a smaller sample size. Similar to the efforts for females, outreach and analysis is being performed and will continue for smaller ethnic groups

During the 2017 Academy Report, women comprised 2.98% of uniform members in contrast to the current female population of the Department at 3.20%. It can be surmised that despite continuing attrition and the closing of one Training Academy, the Department continues to move the needle toward Strategic Plan Goal 4 (Strategy 2) of 5% women by the year 2020.

4.2. Other Essential Factors

A Firefighter candidate's interest and success in the Academy is largely dependent on human elements, personal matters, and other areas. There are a multitude of factors which influence a Recruit's ability, desire, and/or availability to complete the Academy and Probationary Period to the end.

These events which the Department can neither foresee during the hiring process nor influence during the Academy training have occurred in the past. They have affected all portions of preparation, training, and field internship processes and include the following:

- An individual's Decision to work for another agency, i.e., fire department, family proximity, location, etc.
- Family illness
- Personal issues

These facts are difficult to counteract or neutralize as personal inclinations and matters that are inherent to all people can have various effects on preferences and decision-making. The LAFD continues to discuss this issue in detail, maximize messaging to candidates and Recruit Firefighters, and constantly re-evaluate the findings to minimize the impact of such an elusive situation.

Review of Action Plan Goals

The Action Plan Goals as set forth in the 2017 Academy Report are being reviewed to evaluate progress in all of the effected areas. The LAFD continues to monitor and improve upon current goals and create new ones through the assessment of data and for the betterment of the overall Recruit Training process. This section includes an analysis of the Department's 2018-2019 annual performance goals or benchmarks measured against the most recent reporting period associated with the enhancement of the CAP program, FMS system, and training targets of the Academy.

- GOAL 1: Increase female Recruit Firefighter retention at graduation by 5%.

As stated in the End Status analysis, in comparing the Academy retention rates with respect to the End Status reporting of Recruit Classes measured from the 2017 Academy Report to present, the aggregate retention rate for women that graduated from the Training Academy is 63% which is a 6% net gain since the previous reporting period (57%). This is a result of the Department's efforts and Action Plan as discussed in the previous report that included candidate preparation by means of physical fitness and knowledge of tools and equipment.

Females represented 7% of total Graduates, an increase of 2% from last reporting period of 5%. Additionally, Females represented 9% of New Hires which is 1.5 times the previous reporting period of 6%. Out of the 11 females who did not graduate, a total of four are still eligible for graduation which can further bolster the retention rate of women in the Training Academy.

- GOAL 2: Increase overall Recruit Firefighter retention at graduation by 2%.

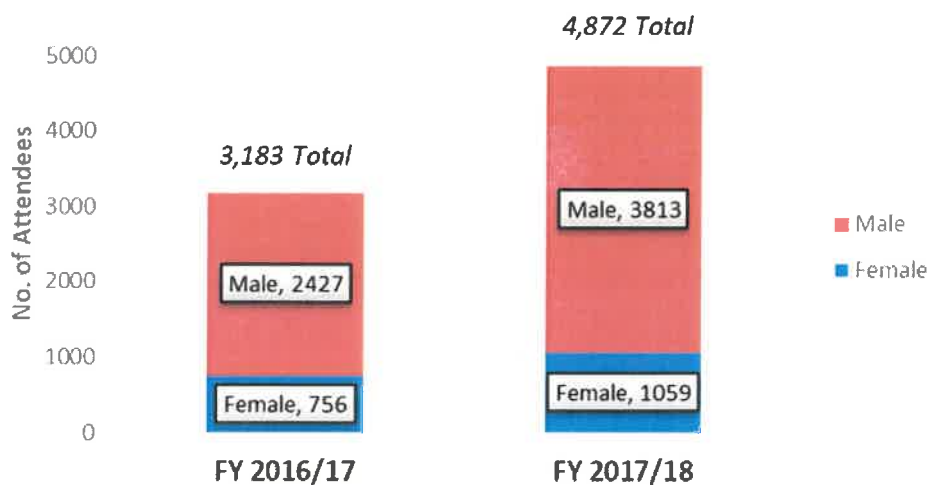
In reviewing and analyzing the data specific to retention rates and comparing the Recruit Academy data from the previous reporting period (6 Recruit Classes) to the present (6 Recruit Classes), it was evident that retention rates have improved overall by 2%, meeting the goal. The Recruit Academy data from the 2017 Academy Report (End Status) indicated that the retention rate was 81% as compared to the most recent reporting period of 83%. This analysis is a positive trend in the retention of Recruit Firefighters in the Academy.

It should be noted that the Department has a historical retention rate in the Academy of 80% (20% attrition) and as the retention rate is increased, the performance targets become more difficult to achieve. However, as the Academy and hiring processes are refined, it is not simply working harder or working smarter; but developing new strategies, new incentives, and fostering new ways to achievement.

- GOAL 3: Increase the CAP program attendance by 5%.

A review and analysis of the CAP program attendance rate indicated an increase of 53% since the last report. The increase in participation extended to both the male and female population. Since preparation is key, the Department initiated meaningful efforts and strategies to increase CAP attendance which included messaging and increasing candidate capacity. This bolster in attendance has the unique potential to contribute in re-conceptualizing traditional male dominated fields such as becoming a Firefighter. This increase is a testament to the value the LAFD has placed on physical fitness and the manipulative portions of the Academy which ultimately prepares candidates for success. The Department is currently refining this process to include more specificity in that candidates who are actually in the hiring process for the LAFD will be invited to participate. This alteration in the process will also change the goal for measurement in this area.

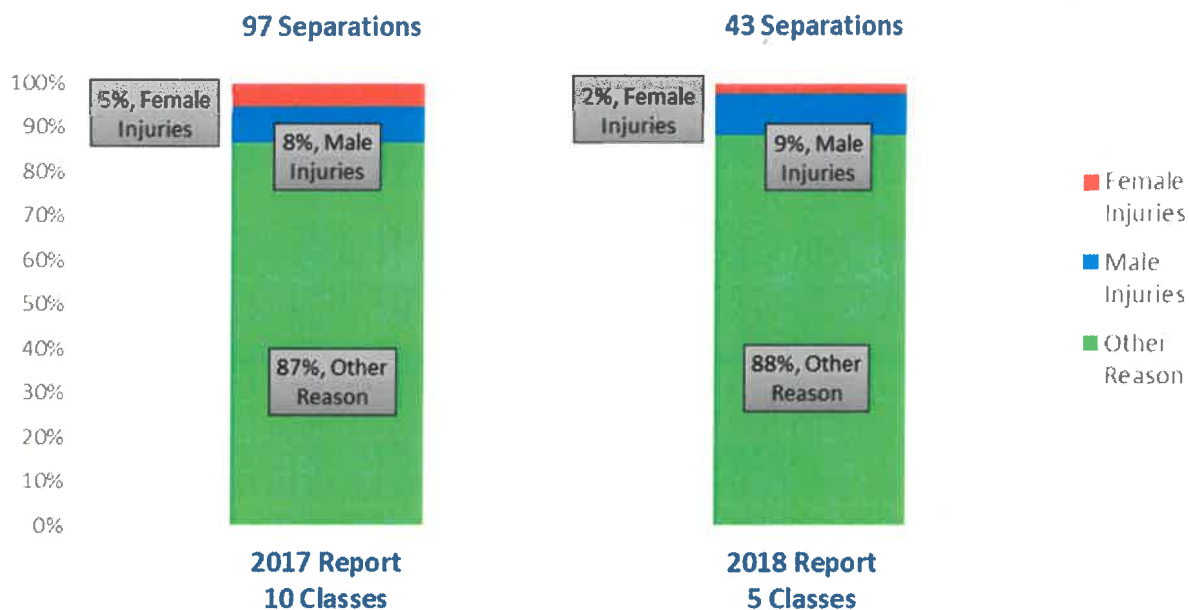
CAPS ATTENDANCE - 53% INCREASE



- GOAL 4: Reduce injury rate by 2%.

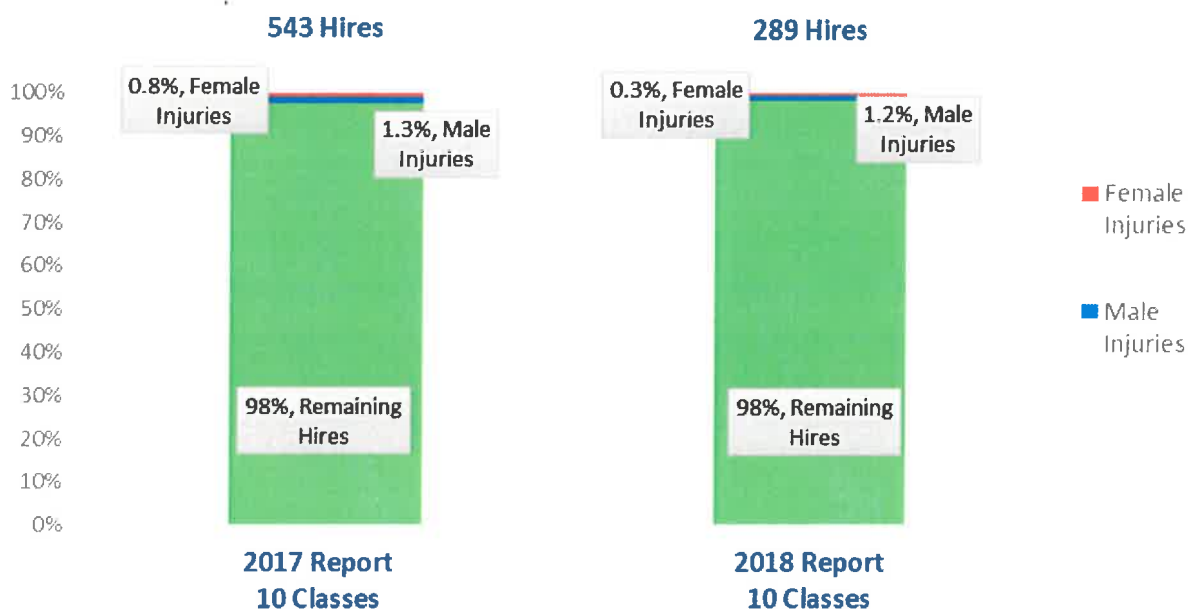
In comparing the 2017 Academy Report on injuries to the current data, injuries were reduced from comprising 13% (13 injuries) of the total attrition of separations to 11%. Five separations from the Academy were due to injury related reasons (1 female or 2%, 4 male or 9%).

Injury Separations



Please note that the data utilized above is specific to or measured from the perspective of total separations. In reviewing the percentage of separations due to injury (2018) relative to New Hires, the injury rate for males and females is 1.2% and 0.3% respectively or a total of 1.5% overall injuries for this reporting period.

Injury - New Hires



It is evident through the assessment of data and Academy records that the CAP program, FMS, and the comprehensive health and wellness program throughout the Academy has been invaluable for Recruits to understand the Firefighter position, requirements, and Academy curriculum to maintain strength, stamina and reduce injuries. The Department continues to place the reduction of injuries and the minimalization of occupational hazards in the Academy as one of its top priorities.

During the next reporting period, the Department will continue to evaluate performance measurements. The Department's 2019-2020 annual performance targets or benchmarks associated with the Academy include the following:

- Increase Female Recruit Firefighter retention at graduation by 2%.
- Increase overall Recruit Firefighter retention at graduation by 2%.
- Evaluate the CAP program attendance rate in light of the change; 15% attendance for those entering the Academy.

The Fiscal Year 2018/2019 Academy graduation dates are included in the chart below which provides a timeline and cascading target dates for analysis:

Academy Class	Academy Start Date	Graduation Date	Probation End Date	Fiscal Year
2018-1	07/23/2018	12/20/2018	12/23/2019	FY 18/19
2018-2	01/07/2019	06/06/2019	06/09/2020	FY 18/19
2018-3	06/24/2019	11/21/2019	11/24/2020	FY 18/19

The Academy dates for Fiscal Year 2019/2020 have not yet been scheduled; however, they will be identified in alignment with preparation for the development of the 2019/2020 Fire Department budget.

CONCLUSION

The LAFD is recognized for innovative excellence and continues to be a world-renowned leader development institution. It is the Department's objective to ensure that the Academy continues to evolve and adapt to changes in the generational, educational and real world environment.

Preparation and knowledge of what it takes to be a Firefighter is key for the success of a candidate in any demographic. As such, the Department strives to provide adequate, accessible, and equitable teaching and educational curricula such as the CAP program and beginner FMS for Firefighter candidates.

All Department Staff of the Training and Support Bureau share a profound sense of why the team exists and are invested in accomplishing its mission and goals.

Board report prepared by Richard F. Rideout, Deputy Chief, Training and Support Bureau.