



# Hennepin County

## Department of Community Corrections and Rehabilitation

### Office of Policy, Planning and Evaluation

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## YLS/CMI Quality Assurance Report

*April 2017*

### Introduction

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The Department of Community Corrections and Rehabilitation uses the Youth Level of Service/Case Management Inventory (YLS/CMI) for risk assessment of juvenile offenders. YLS/CMI results help drive the most important decisions regarding case management for youth under the department's jurisdiction. The Department uses an annual quality assurance process to test the scoring proficiency and accuracy among staff members who use the YLS/CMI. This report gives the results of the latest quality assurance review.

### Summary

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Results of the 2017 quality assurance process show a decline from last year's levels of accuracy and proficiency. This is the second year in a row showing a decline.

### Methodology

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The YLS/CMI presents a total of 42 individual risk items in eight different domains. The presence of any of the risk items indicates increased risk of re-offense in the community. The items are given one point if the risk factor is present and zero if it is not (or if the answer is unknown). The number of positive answers is summed to arrive at a risk score.

Staff certified to administer the YLS/CMI participate in annual scoring exercises to measure proficiency and accuracy with the tool. Staff score a scenario presented via a video of a client assessment interview. Staff also receive supplementary written documentation to further simulate a full assessment process. All score the same scenario. Scoring is completed using an on line system which includes internal validation rules for data entry, removing one possible source of error. This year, 68 juvenile probation officers and supervisors took part in the process.

Assessors are rated statewide on two dimensions: proficiency and accuracy. An assessor is deemed to be proficient if the final score of the assessment is within two points of the actual score. The established statewide goal for accuracy is 90% correct items.

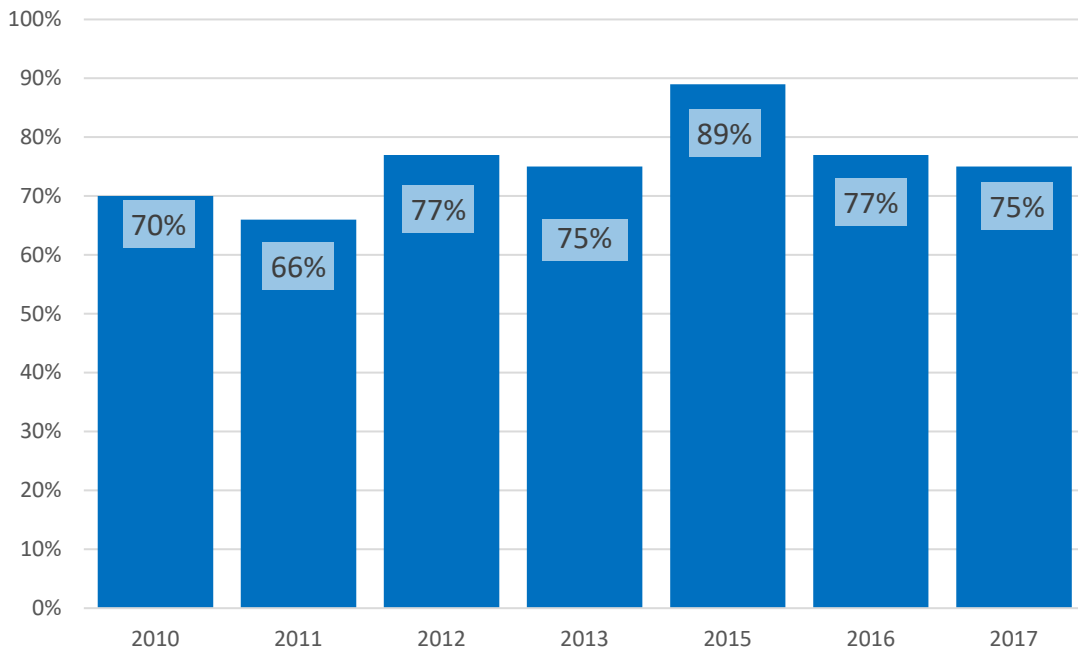
Both of these aspects are important. The overall score on the instrument can determine the level of supervision accorded to a client. Accurate scoring of specific items, on the other hand, identifies the specific criminogenic needs presented by the individual being assessed, and determines the specific areas to be addressed in order

to reduce the risk of re-offense. DOCCR will be tailoring training in response to the results of this quality assurance process in the future.

## Scoring Proficiency

Overall, 51 of the assessors, or 75% scored within two points of the scenario score. This is slightly lower the 77% proficiency rate seen last year, and similar to levels seen in 2013 and 2015. Figure 1 shows the percentage of assessors who met the +/- two points criteria in each annual QA process.

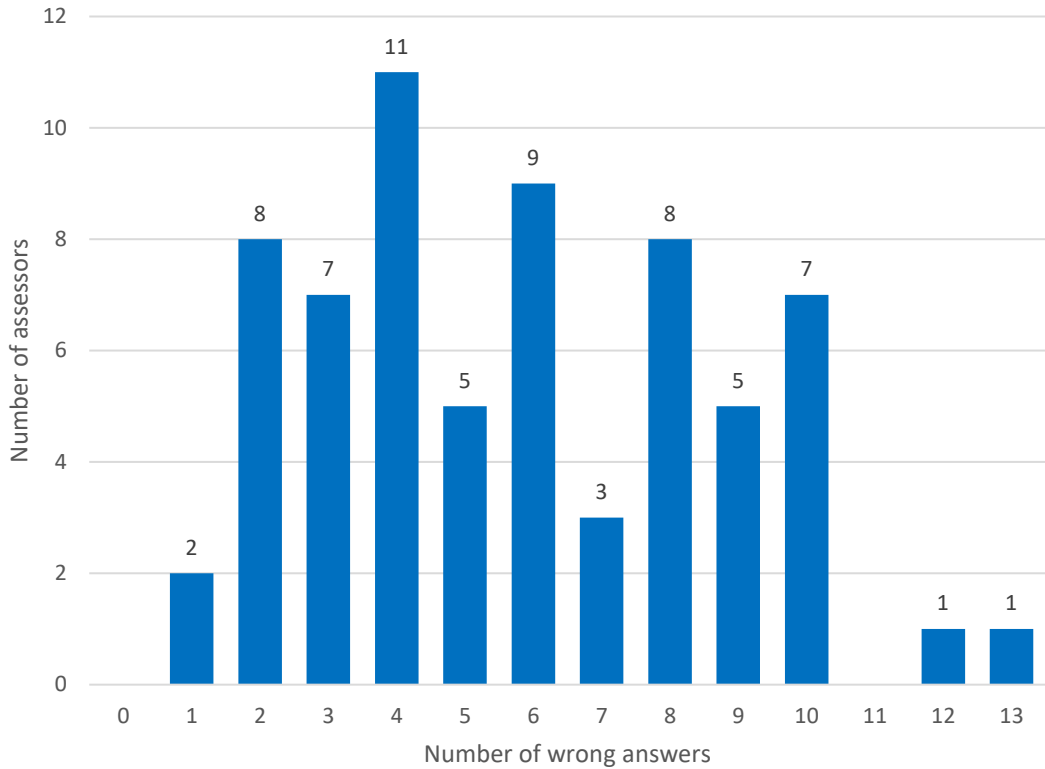
Fig. 1: Percent of assessors within two points of true score, 2010 - 2017



## Scoring Accuracy

The average level of correct answers among the assessors was 86%, somewhat lower than last year's 89%. No assessors got every item correct, and the lowest percentage correct was 69%, ten points below last year's low score. Figure 2 shows the distribution of wrong answers by assessors.

Fig. 2: Number of assessors with wrong answers, 2017

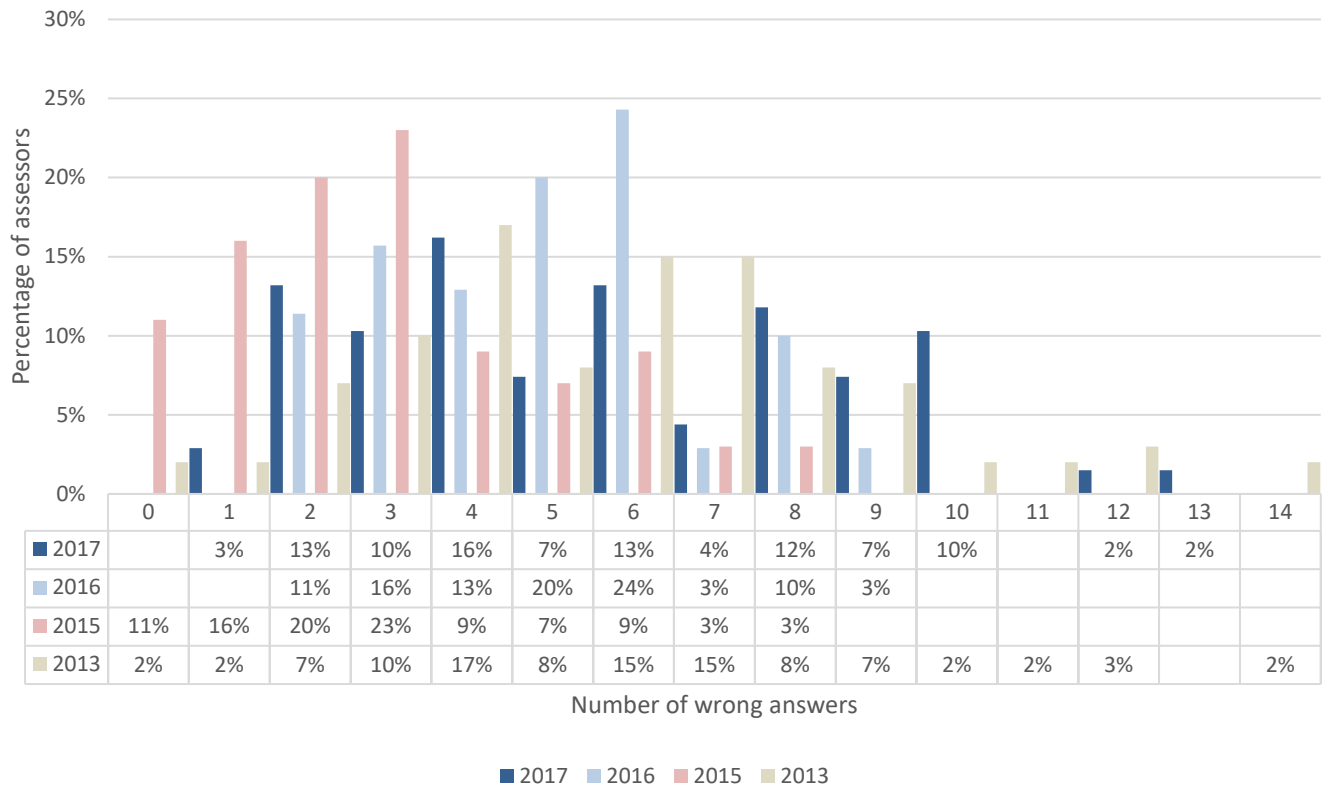


### *Comparison with prior years*

The distribution of incorrect scores has gotten somewhat worse since the last quality assurance process. Figure 3 compares the results of the current process with those of prior years. The dark blue bar represents this year's results. Because of the difference in number of assessors participating, this figure shows the percentage of assessors with incorrect answers.

Figure 3 shows that there was a higher proportion of wrong answers this year, compared to prior years. It also indicates that there was a wider spread of wrong answers than any time since 2013.

Fig. 3: Percentage of Assessors with wrong answers, 2013, 2015, 2016 and 2017

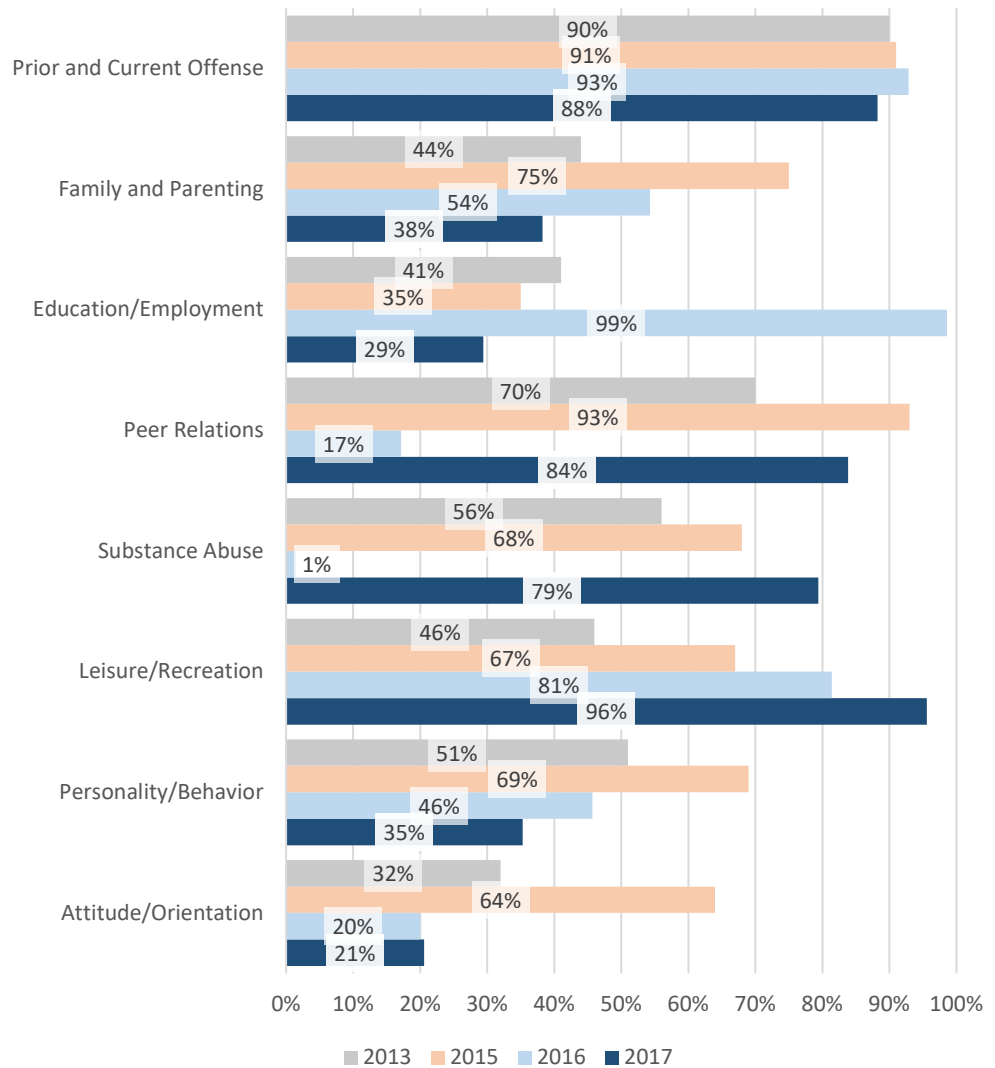


### Domain accuracy

The YLS/CMI assesses risk based on eight different domains. Each domain asks three to seven questions assessing risk in one particular area. Assessors need to be skilled in assessing all the domains.

Figure 4 shows the percentage of assessors answering all questions in domains correctly, for this year as well as 2013, 2015 and 2016.

Fig. 4: Percent of assessors with all items correct in domains, 2013, 2015, 2016 & 2017



It is interesting to note the wide variation between different years, and between the different domains. Besides potentially reflecting the level of training among assessors, the annual difference could also be a function of the difference in scenarios used in the QA Process. The wide variance in individual domains could be caused by the difference in the number of questions per domain. Domains have anywhere from three to seven questions – a domain with more questions is less likely to have every question correct.

Table 1 shows the individual questions with the highest and lowest percentage correct.

**Table 1: Questions most and least correctly answered**

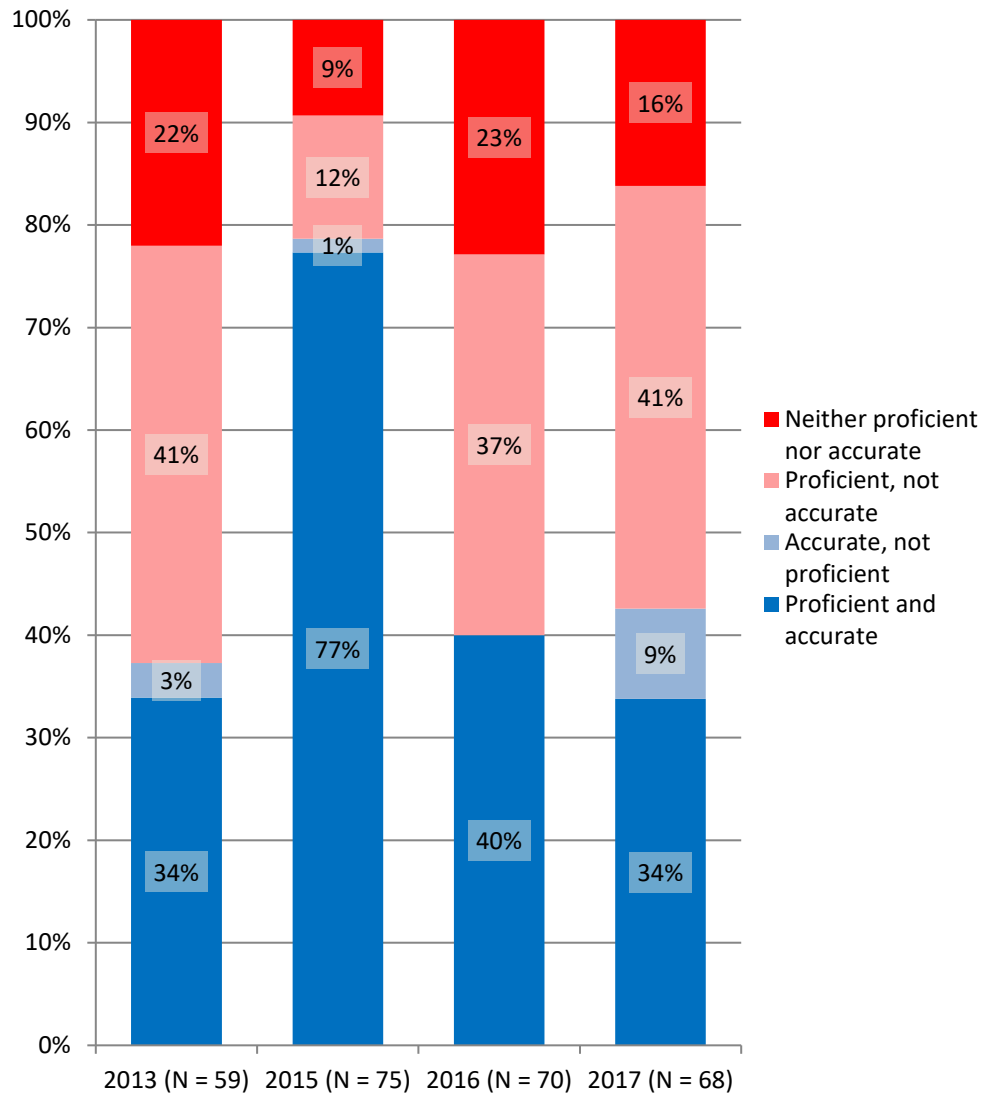
<i>Question</i>		<i>Percent Correct</i>
3g	Unemployed/Not seeking work	100%
4a	Some delinquent acquaintances	100%
5a	Occasional Drug Use	100%
6a	Limited organized activities	100%
7a	Inflated self esteem	100%
7c	Tantrums	100%
7d	Short attention span	100%
7b	Physically aggressive	59%
2b	Difficulty controlling behavior	56%
7e	Poor frustration tolerance	54%
8a	Anti-social/Pro-criminal attitudes	44%
8d	Defies authority	32%

### Overall inter-rater reliability

As noted above, gauging the overall fidelity of assessors looks at a combination of both accuracy and proficiency. Figure 5 compares the proficiency and accuracy combined for the current QA process and those of prior years.

The figure shows that the results of this year's quality assurance process shows a continued decrease in proficiency and accuracy from 2016 and 2015, the year with the highest accuracy and proficiency ratings. This may be a reflection of a continued decline in assessor skills, more difficult scenarios, or some combination of the two.

Figure 5: Accuracy and proficiency compared, 2013, 2015, 2016 and 2017



## Training needs scale

The DOCCR Train, Coach, Practice unit has proposed a scale for determining training needs for individual officers based on the scoring of the scenario. Officers fall into one of three levels:

- **Silver:** 85% accuracy and below. Requires four hours of training each year plus the annual proficiency exercise.
- **Gold:** 86% to 92% of the items scored correctly. Requires two hours of training annually and the proficiency exercise
- **Platinum:** More than 93% of the items scored correctly. No additional training beyond annual proficiency exercise.

Figure 6 shows that over half of the assessors score in the Silver level. This is a large decline from 2016, when 57% were at the Gold level. The percentage at the Platinum level remained unchanged.

Fig 6: Overall training needs scale levels, 2017

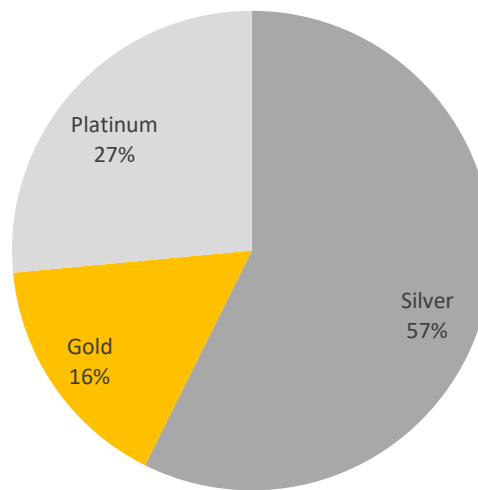


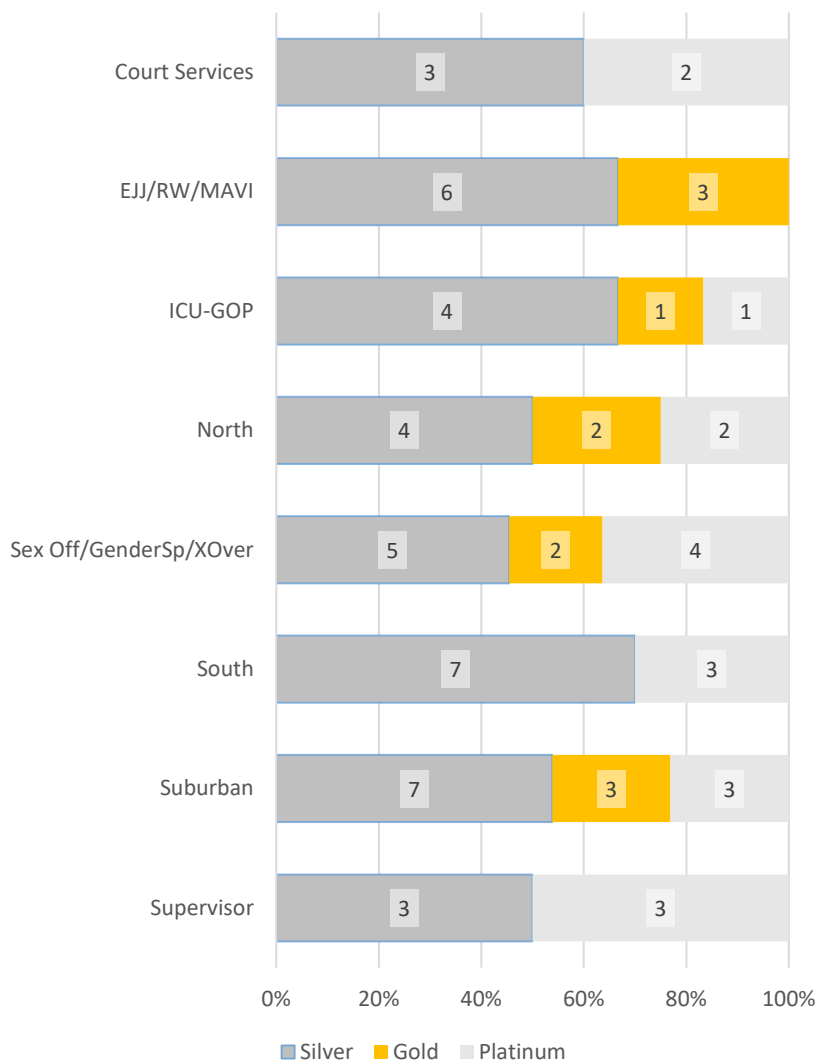
Figure 7 shows the breakdown of the individual units on the training needs scale.<sup>1</sup> Units varied a great deal in the level of training needed by officers

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<sup>1</sup> The assignment of officers to units is based on the Juvenile Probation organization chart dated 2/21/17. Some changes in officer assignment may have happened between the date of the chart and the time the exercise was completed. However, this is the best data available for officer assignment.



Fig. 7: Training needs scale by unit, 2017



## Conclusion

The results of the 2017 YLS/CMI Quality Assurance exercise show a continued decline from last year's results. This may be a reflection of a more difficult scenario for officers to score, increased training needs among officers, or some combination of both.

## Appendix: Percent of Raters Scoring Items Correctly

Domain/Item	Percent of Raters
<b>Prior and Current Offense/Dispositions</b>	
1a. Three or more prior convictions	96%
1b. Two or more failures to comply	99%
1c. Prior probation	91%
1d. Prior custody	99%
1.e Three or more current convictions	96%
<b>Family Circumstances/Parenting</b>	
2a. Inadequate supervision	99%
2b. Difficulty in controlling behavior	91%
2.c Inappropriate discipline	91%
2d. Inconsistent parenting	85%
2e. Poor relations (father-youth)	88%
2f. Poor relations (mother-youth)	93%
<b>Education/Employment</b>	
3a. Disruptive classroom behavior	75%
3b. Disruptive behavior on school property	80%
3c. Low achievement	69%
3d. Problems with peers	81%
3e. Problems with teachers	72%
3f. Truancy	84%
3g. Unemployed/not seeking employment	100%
<b>Peer Relations</b>	
4a. Some delinquent acquaintances	100%
4b. Some delinquent friends	93%
4c. No/few positive acquaintances	94%
4d. No/few positive friends	88%
<b>Substance Abuse</b>	
5a. Occasional drug use	100%
5b. Chronic drug use	94%
5c. Chronic alcohol use	81%
5d. Substance abuse interferes with life	93%
5E. Substance use linked to offense(s)	99%
<b>Leisure/Recreation</b>	
6a. Limited organized activities	100%
6b. Could make better use of time	97%
6c. No personal interests	99%
<b>Personality/Behavior</b>	
7a. Inflated self-esteem	100%
7b. Physically aggressive	59%
7c. Tantrums	100%
7d. Short attention span	100%
7e. Poor frustration tolerance	54%
7f. Inadequate guilt feelings	75%
7g. Verbally aggressive, impudent	90%
<b>Attitudes/Orientation</b>	
8a. Anti-social/pro-criminal attitudes	44%
8b. Not seeking help	88%
8c. Actively rejecting help	99%
8d. Defies authority	32%
8e. Callous, little concern for others	99%