

District Enrollment Allocation Base (DEAB) Target Setting

BAC Meeting
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BETTER JOBS, BRIGHTER FUTURES, A STRONGER WASHINGTON



Overview

- Original principles governing model continue to guide our work.
- Model for 2017-18 is nearly ready for use.
- Projections for 2017-18 and 2018-19 revealed some unanticipated outcomes in District Enrollment Allocation Base (DEAB) Target.
- Simple formula adjustments will restore predictability, reliability and balance.

Allocation System Principles

The allocation system should:

1. Be stable.
2. Be predictable.
3. Be understandable.
4. Treat all colleges consistently and impartially.
5. Do as little harm as possible to other colleges.
6. Allow for flexibility in local decisions about use of funding.
7. Achieve an appropriate balance between access/enrollment and performance/student outcomes.

DEAB Formula Policy Origins

2017 Enrollment Rules

Enrollments in the District Enrollment Allocation Base (DEAB)

The portion of the overall system target outside of safe harbor is referred to as the District Enrollment Allocation Base (DEAB). For FY 2017 the system-wide DEAB target is 130,977. The districts share of DEAB will determine the allocation of state appropriations for weighted and unweighted enrollments.

Establishing the DEAB

The DEAB for each district will be set using the following method.

- A. The DEAB target will use a comparison of the district's three year average DEAB target to the district's actual DEAB enrollments.
 1. Data used will be last three full academic years available for analysis (e.g., FY 2017 will use 2013, 2014 and 2015).
- B. When comparing the three year averages, districts are grouped into two categories.
 1. When the three year average actual enrollment is below the three year average target enrollment, the district is under-enrolled for purposes of allocation development
 - a. The difference between three year target enrollments and three year actual enrollments is calculated for all under-enrolled schools
 - i. The amount calculated is subtracted from the district's current DEAB target
 - a. This becomes the district's new DEAB target
 - ii. DEAB target enrollments removed are pooled for redistribution
 2. When the three year average actual enrollment is above the three year average target enrollment, the district is considered over-enrolled for allocation purposes
 - a. The difference between three year target enrollments and three year actual enrollments is calculated for all over-enrolled schools
 - i. The amount calculated for each over-enrolled district is converted to a "percentage share" of total district over-enrollments calculated.
 - ii. Districts receive a share of DEAB target enrollments pooled for redistribution in B.1.a.ii (above)
 - iii. The value of the redistribution enrollment share is added to the over-enrolled districts DEAB target.
 - a. This becomes the district's new DEAB target
 - C. The district base enrollment value set in rule three above is added to any enrollments allocated and governed by proviso or earmark.
 1. This enrollment total is the new target used to determine annual enrollment target attainment.
 - i. Serves as the base from which districts with annual over-enrollment will calculate excess tuition.

Summary of DEAB Formula

	Comparison	Calculation		Redistribution of enrollments
Current Formula	Compare: 3-year average actual to 3-year average target	Difference added to or taken from	Current DEAB target	Under-enrollments redistributed to over-enrolled colleges based on their share of total over-enrollments.

Illustration of DEAB Formula

Sample under-enrolled:

4,000	3-year average actual enrollments
<u>-4,300</u>	3-year average target
(300)	enrollments under target

Rule reference

B.1.a

The difference is subtracted from the current DEAB target

B.1.a.i

4,100	2016-17 DEAB Target
<u>-300</u>	under-enrollments
3,800	New 2017-18 DEAB Target

B.1.a.i

B.1.a.i.a

Illustration of DEAB Formula

Sample over-enrolled:

		<u>Rule reference</u>
5,000	3-year average actual enrollments	<i>B.2.a</i>
<u>-4,300</u>	3-year average target	
700	enrollments over target (10% of all)	<i>B.2.a.i</i>

Under-enrollments are pooled and redistributed based on share of over-enrollments.

Assume 3,500 under-enrollments systemwide.

4,800	2016-17 DEAB Target	
<u>350</u>	FTE (10% of 3,500)	<i>B.2.a.iii</i>
5,150	New 2017-18 DEAB Target	

Note: Difference from 3-yr averages applied to 2016-17 DEAB

Sample under-enrolled:

4,000	3-year average actual enrollments
<u>-4,300</u>	3-year average target
(300)	enrollments under target

4,100	2016-17 DEAB Target ←
<u>-300</u>	under-enrollments
3,800	New 2017-18 DEAB Target

Below 3-yr avg actuals

Sample over-enrolled:

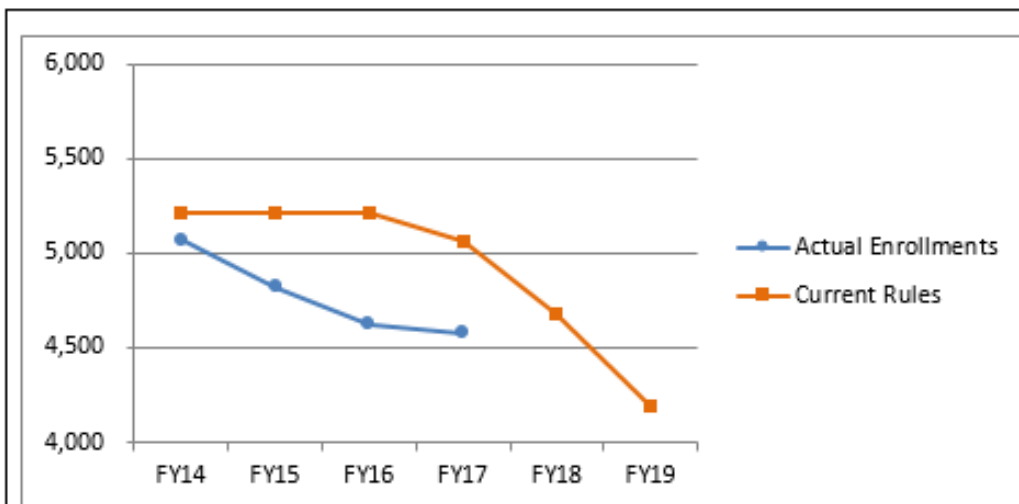
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Above 3-yr avg actuals

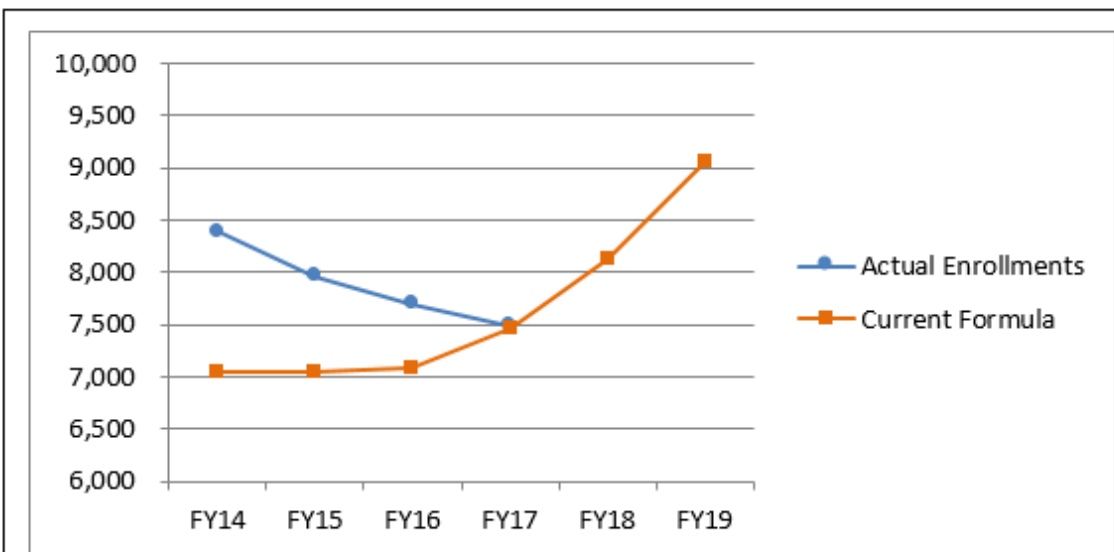
Unanticipated outcome for under-enrolled district:



Example District A

	FY14	FY15	FY16	FY17	FY18	FY19
Actual Enrollments	5,071	4,819	4,624	4,580		
Current Rules	5,211	5,211	5,211	5,057	4,684	4,198
Adjust 3-yr Average				5,057	4,852	4,699
Balance Over-Under				5,057	4,852	4,906

Unanticipated outcome for over-enrolled district:



Example District B

	FY14	FY15	FY16	FY17	FY18	FY19
Actual Enrollments	8,385	7,962	7,697	7,492		
Current Formula	7,056	7,056	7,090	7,473	8,125	9,055

WHY?

First issue:

- Numbers included in 3-year average target are all pre-rebase.
- Number adjusted is one-year target, post-rebase.

Example:

	2013-14	2014-15	2015-16	2016-17	2013-14	2014-15	2015-16	2016-17
	Actual	Actual	Actual	Est. Actual	Target	Target	Target	Target
	5,071	4,819	4,624	4,580	5,211	5,211	5,211	5,057
3-year average	4,838				5,211			
3-year average	4,674				5,160			

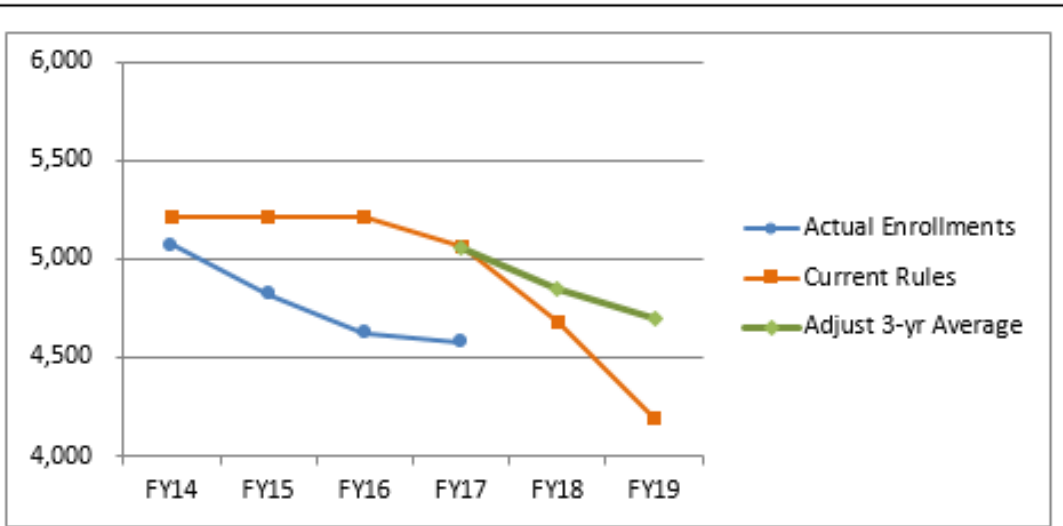
For Years:	Difference in Averages	Current Target	New Target
2017-18	(373)	5,057	4,684
2018-19	(485)	4,684	4,199



POTENTIAL ADJUSTMENT

	Comparison	Calculation	Redistribution of enrollments
Current formula	Compare: 3-year average actual to 3-year average target	Difference added to or taken from	Current DEAB target
Alternative			3-year average target

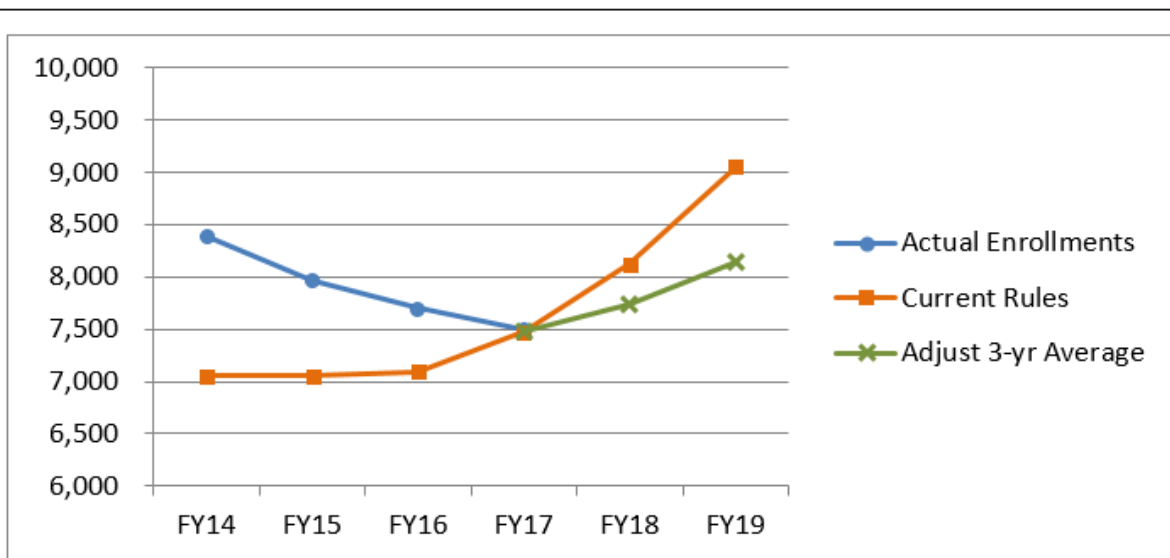
Under-enrolled District with 3-year Average Target



Example District A

	FY14	FY15	FY16	FY17	FY18	FY19
Actual Enrollments	5,071	4,819	4,624	4,580		
Current Rules	5,211	5,211	5,211	5,057	4,684	4,198
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Over-enrolled District with 3-year Average Target



Example District B

	FY14	FY15	FY16	FY17	FY18	FY19
Actual Enrollments	8,385	7,962	7,697	7,492		
Current Rules	7,056	7,056	7,090	7,473	8,125	9,055
Adjust 3-yr Average				7,473	7,740	8,135

Potential adjustment for first issue:

- Using 3-year average target in place of “current year target” restores stability to 2017-18.
- Still has desired effect of ‘right sizing’ model, moving targets closer to actuals.

Second issue: In 2018-19 balance of system enrollments shifts as enrollments have continued to decline.

- In 2017-18, there are 16 over-enrolled and 14 under-enrolled districts. When pooled there are more over-enrolled FTE (about 2/3 over and 1/3 under).
- In 2018-19, 12 districts over-enrolled and 18 under-enrolled.
- When all ‘excess FTE’ are pooled there are more under-enrolled than over-enrolled (about 2/3 to 1/3).

WHY?

Current formula would redistribute all under-enrollments to over-enrolled districts, no matter how few are over-enrolled.

System Balance Of Over- & Under-enrollments

Assume system target of 26,900

Current formula

District	3yr avg Target	3yr avg Actual	3yr av act over	3yr av act under	% of over-enroll	Redistri-bution	New Target
1	2,100	1,900		(200)			1,900
2	6,800	6,600	-	(200)			6,600
3	4,000	3,900	-	(100)			3,900
4	4,500	4,600	100		33%	167	4,667
5	4,800	4,500		(300)			4,800
6	4,700	4,900	200		67%	333	5,033
	26,900	26,400	300	(800)		500	26,900

Difference from target: 500

POTENTIAL ADJUSTMENT

	Comparison	Calculation		Redistribution of enrollments
Current formula	Compare: 3-year average actual to 3-year average target	Difference added to or taken from	Current DEAB target	Under enrollments redistributed to over enrolled colleges
Alternative			3-year average target	Redistribution method shifts based on whether there are more under- or over-enrollments systemwide

Narrative Of Formula

After 3- year averages are compared if there are more system...	
Over-enrollments	Under-Enrollments
Under-enrolled district's 3-year avg actuals becomes target	Over-enrolled district's 3-year avg actuals become target.
Under-enrollments are pooled	Over-enrollments are pooled
Redistributed to over-enrolled colleges based on their share of over-enrollments up to system target of 130,977*	Redistributed to under-enrolled colleges as reduction based on their share of under-enrollments*

*Assumes 130,977 target is achieved.

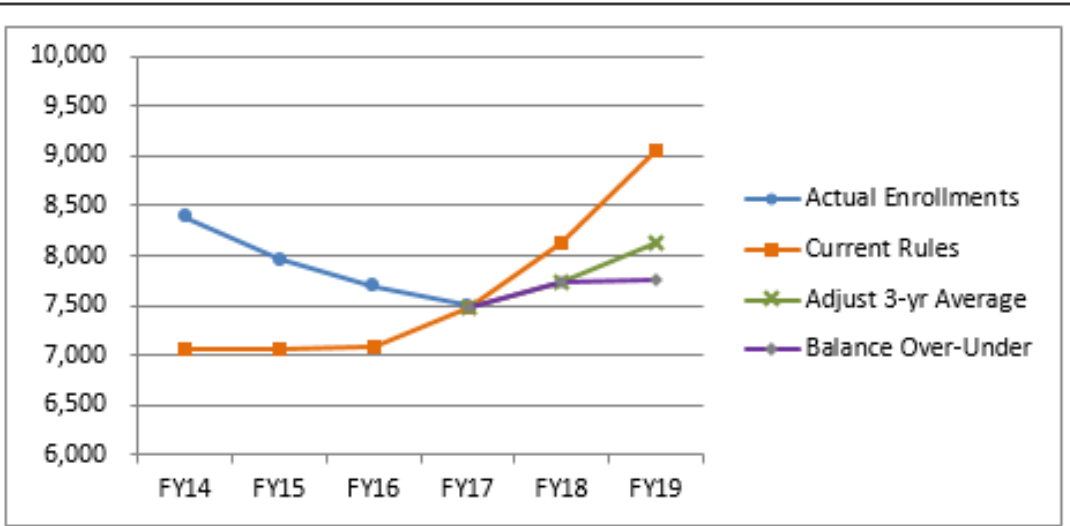
(examples follow)

Potential Adjustment when More Under-Enrollments System wide

Balance based on over- or under-enrollments

District	3yr avg Target	3yr avg Actual	3yr av act over	3yr av act under	% of under-enroll	Redistri-bution	New Target
1	2,100	1,900		(200)	25%	(75)	2,025
2	6,800	6,600	-	(200)	25%	(75)	6,725
3	4,000	3,900	-	(100)	13%	(38)	3,963
4	4,500	4,600	100			-	4,600
5	4,800	4,500		(300)	38%	(113)	4,688
6	4,700	4,900	200			-	4,900
	26,900	26,400	300	(800)		(300)	26,900

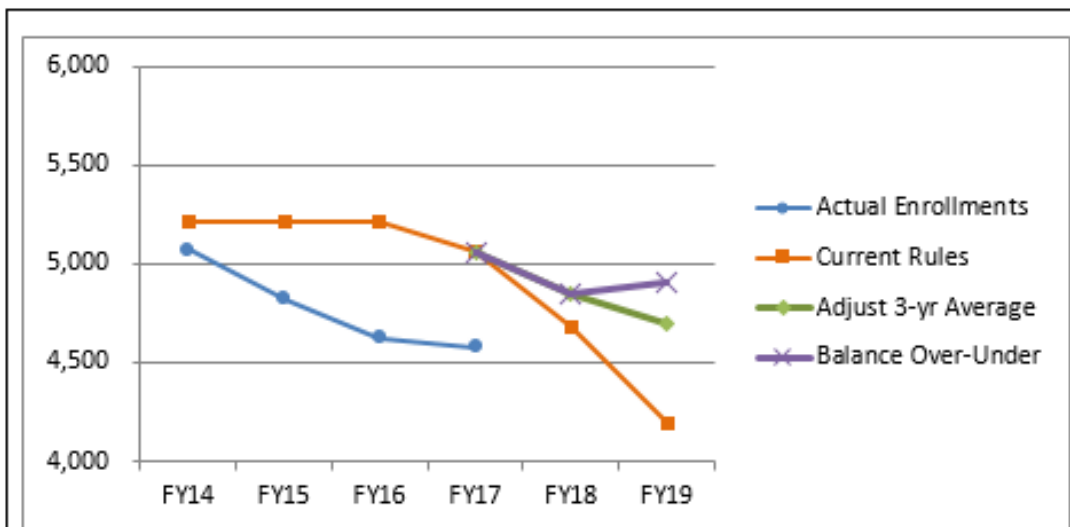
Over-enrolled District With 3-year avg & Balance



Example District B

	FY14	FY15	FY16	FY17	FY18	FY19
Actual Enrollments	8,385	7,962	7,697	7,492		
Current Rules	7,056	7,056	7,090	7,473	8,125	9,055
Adjust 3-yr Average				7,473	7,740	8,135
Balance Over-Under				7,473	7,740	7,758

Under-enrolled District With 3-year Avg & Balance



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CONCLUSION

- Two Issues Raised
 1. Use of current year target compared to 3-year actuals.
 2. In 2018-19 balance of over- and under-enrollment shifts.
- Two potential formula fixes provided.
- Further analysis will take place in OBC and discussion tomorrow.
- Feedback on how to present to WACTC?