

ANB Decline Analysis

EXHIBIT NO. 1

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BILL NO. Discussion

JES

The following tables present a brief dissection of the effects of enrollment decline on school district budgets. These tables, separately for elementary, K-12, and high schools, show average expenditures per ANB in 2004 for functionally grouped expenditures for varying sized districts experiencing varying increases or decreases in ANB between 2000 and 2004. All expenditures from the general fund and the impact aid fund are included. The school size groups are listed along the left side while the ANB increase or decrease range is listed at the top. A count of the number of LE, or districts, in each group is shown as well. Districts which receive federal impact aid in excess of 25% of their BASE budget are excluded as their extraordinarily high expenditure levels distort the generalized results. A description of the functional categories is attached. Several conclusions are evident:

- In general, the greater the ANB decline experienced by a district the higher the percent of maximum and the higher the expenditure per ANB.
- Smaller schools are experiencing a higher rate of ANB decline and the greatest cost increases as is apparent from their higher "Count of LE" in the declining ANB groups.
- The average expenditure per ANB rises continually as schools get smaller; costs that increase the most on a per ANB basis are extracurricular, administration, and operation & maintenance.

The first table shows 73 of 98 high school districts had a decline in ANB from 2000 to 2004. This excludes the 12 high school districts with high amounts of federal impact aid. Of the 39 districts with fewer than 100 ANB 32 experienced an ANB decline. Districts with ANB increases exceeding 10% spent on average 92% of their maximum budget while those with ANB decreases exceeding 10% spent on average 101% of their maximum budget. Average expenditure per ANB ranged from \$5,191 in districts over 1000 ANB to \$12,847 in districts under 50 ANB.

The second table shows 43 of 53 K12 districts had a decline in ANB from 2000 to 2004. This excludes 2 K12 districts with high amounts of federal impact aid. Districts with ANB increases exceeding 10% spent on average 100% of their maximum budget while those with ANB decreases exceeding 10% spent on average 108% of their maximum budget. Average expenditure per ANB ranged from \$4,500 in districts over 700 ANB to \$16,525 in districts under 75 ANB.

The third table shows 168 of 249 elementary districts had a decline in ANB from 200 to 2004. This excludes 21 elementary districts with high amounts of federal impact aid. Districts with ANB increases exceeding 10% spent on average 96% of their maximum budget while those with ANB decreases exceeding 10% spent on average 100% of their maximum budget. Average expenditure per ANB ranged from \$4,528 in districts over 1000 ANB to \$6,730 in districts under 30 ANB.

ANB Grp	Data	ΔANB>+10%	ΔANB0%to+10%	ΔANB0%to-10%	ΔANB>-10%	Grand Total
HS<50	Average of Instr		5,575	7,140	7,320	7,049
	Average of Other		293	305	352	340
	Average of Admin		1,625	1,947	2,098	2,020
	Average of O&M		1,727	1,839	1,879	1,854
	Average of XtraCur		1,045	1,239	1,264	1,230
	Average of Fac&Misc		35	81	228	192
	Average of Total		10,351	12,552	13,334	12,847
	Average of 05 %Max		99%	98%	103%	102%
	Count of LE		3	1	16	20
HS50-100	Average of Instr	3,825	4,116	3,995	4,464	4,261
	Average of Other	327	182	398	414	377
	Average of Admin	1,299	1,135	1,229	1,413	1,333
	Average of O&M	1,625	1,478	1,003	1,374	1,334
	Average of XtraCur	694	777	747	833	795
	Average of Fac&Misc	234	19	96	119	116
	Average of Total	8,123	7,814	7,518	8,711	8,303
	Average of 05 %Max	95%	102%	90%	101%	98%
	Count of LE	2	2	4	11	19
HS100-150	Average of Instr	3,851	3,261	3,395	4,100	3,771
	Average of Other	510	380	607	293	381
	Average of Admin	910	1,211	1,404	1,223	1,204
	Average of O&M	982	848	1,025	1,063	995
	Average of XtraCur	842	916	768	633	747
	Average of Fac&Misc	160	282	144	7	112
	Average of Total	7,292	7,060	7,686	7,345	7,310
	Average of 05 %Max	97%	97%	107%	96%	98%
	Count of LE	1	2	1	4	8
HS150-250	Average of Instr	3,518	3,424	3,545	3,266	3,384
	Average of Other	402	381	326	432	395
	Average of Admin	805	851	881	919	888
	Average of O&M	749	784	745	1,092	925
	Average of XtraCur	683	410	462	683	587
	Average of Fac&Misc	-	35	71	79	63
	Average of Total	6,165	5,980	6,137	6,558	6,327
	Average of 05 %Max	83%	93%	95%	101%	96%
	Count of LE	2	3	5	10	20
HS250-500	Average of Instr	2,943	3,087	3,530	3,307	3,276
	Average of Other	429	382	378	451	417
	Average of Admin	850	767	687	818	779
	Average of O&M	963	709	787	991	884
	Average of XtraCur	519	471	388	496	467
	Average of Fac&Misc	240	37	173	17	87
	Average of Total	6,038	5,493	5,985	6,137	5,966
	Average of 05 %Max	96%	91%	95%	99%	96%
	Count of LE	2	3	4	7	16
HS500-1000	Average of Instr		3,022	3,156	2,833	3,042
	Average of Other		508	432	627	500
	Average of Admin		663	628	789	677
	Average of O&M		788	675	792	732
	Average of XtraCur		455	299	332	346
	Average of Fac&Misc		6	54	180	73
	Average of Total		5,491	5,293	5,704	5,445
	Average of 05 %Max		100%	93%	100%	96%
	Count of LE		2	4	2	8
HS>1000	Average of Instr		3,123	3,025		3,067
	Average of Other		559	552		555
	Average of Admin		555	526		538
	Average of O&M		633	734		691
	Average of XtraCur		276	217		242
	Average of Fac&Misc		29	38		34
	Average of Total		5,242	5,153		5,191
	Average of 05 %Max		98%	97%		98%
	Count of LE		3	4		7
Total Average of Instr		3,489	3,690	3,612	4,882	4,266
Total Average of Other		403	388	417	402	403
Total Average of Admin		974	967	871	1,410	1,171
Total Average of O&M		1,094	988	843	1,378	1,160
Total Average of XtraCur		662	606	475	858	708
Total Average of Fac&Misc		159	57	88	125	106
Total Average of Total		6,849	6,774	6,379	9,170	7,909
Total Average of 05 %Max		92%	96%	95%	101%	98%
Total Count of LE		7	18	23	50	98

ANB Grp	Data	ΔANB>+10%	ΔANB0%to+10%	ΔANB0%to-10%	ΔANB>-10%	Grand Total
K12<75	Average of Instr				8,538	8,538
	Average of Other				390	390
	Average of Admin				3,399	3,399
	Average of O&M				2,393	2,393
	Average of XtraCur				1,601	1,601
	Average of Fac&Misc				80	80
	Average of Total				16,525	16,525
	Average of 05 %Max				131%	131%
K12 75-150	Count of LE				5	5
	Average of Instr	3,754	5,013	4,554	5,258	4,973
	Average of Other	435	327	265	331	343
	Average of Admin	1,035	1,055	1,226	1,278	1,217
	Average of O&M	934	1,161	1,019	1,335	1,242
	Average of XtraCur	464	863	422	710	674
	Average of Fac&Misc	71	1,274	-	75	190
	Average of Total	6,758	9,695	7,486	9,062	8,701
K12 150-300	Average of 05 %Max	101%	102%	98%	109%	107%
	Count of LE	3	2	1	14	20
	Average of Instr			3,671	3,621	3,647
	Average of Other			246	270	257
	Average of Admin			928	865	899
	Average of O&M			947	912	931
	Average of XtraCur			457	386	424
	Average of Fac&Misc			43	151	93
K12 300-700	Average of Total			6,313	6,220	6,270
	Average of 05 %Max			101%	98%	100%
	Count of LE			7	6	13
	Average of Instr		2,489	3,258	3,327	3,188
	Average of Other		266	220	273	257
	Average of Admin		557	699	677	666
	Average of O&M		704	606	729	690
	Average of XtraCur		276	413	417	396
K12 >700	Average of Fac&Misc			45	99	84
	Average of Total		4,513	5,287	5,565	5,336
	Average of 05 %Max		80%	95%	99%	95%
	Count of LE		1	2	4	7
	Average of Instr	2,717	2,591	2,806	2,930	2,746
	Average of Other	420	364	182	351	322
	Average of Admin	707	531	467	629	562
	Average of O&M	635	624	482	767	626
Total	Average of XtraCur			166	176	181
	Average of Fac&Misc			44	26	45
	Average of Total	4,695	4,411	4,146	4,891	4,500
	Average of 05 %Max	98%	85%	82%	95%	88%
	Count of LE	1	3	2	2	8
	Total Average of Instr	3,495	3,382	3,531	5,071	4,412
	Total Average of Other	432	336	232	322	312
	Total Average of Admin	953	710	838	1,421	1,173
Total Average of O&M	859	817	819	1,309	1,108	
Total Average of XtraCur	391	432	399	719	589	
Total Average of Fac&Misc	64	480	37	90	120	
Total Average of Total	6,242	6,189	5,879	8,996	7,764	
Total Average of 05 %Max	100%	90%	97%	108%	103%	
Total Count of LE	4	6	12	31	53	

ANB Grp	Data	ΔANB>+10%	ΔANB0%to+10%	ΔANB0%to-10%	ΔANB>-10%	Grand Total
ES<30	Average of Instr	3,662	3,932		4,504	4,213
	Average of Other	42	75		85	73
	Average of Admin	734	749		1,045	927
	Average of O&M	1,025	869		1,148	1,082
	Average of XtraCur	36	120		53	57
	Average of Fac&Misc	169	487		434	371
	Average of Total	5,674	6,234		7,280	6,730
	Average of 05 %Max Count of LE	98% 24	94% 11		96% 56	96% 91
ES30-100	Average of Instr	2,808	3,111	3,111	3,549	3,304
	Average of Other	185	126	97	212	169
	Average of Admin	707	528	602	891	748
	Average of O&M	496	704	645	849	744
	Average of XtraCur	95	143	161	218	181
	Average of Fac&Misc	109	319	116	175	179
	Average of Total	4,431	4,936	4,731	5,903	5,332
	Average of 05 %Max Count of LE	92% 5	91% 8	95% 11	104% 25	99% 49
ES100-150	Average of Instr	3,232	2,593	3,016	3,367	3,218
	Average of Other	434	154	173	238	234
	Average of Admin	762	873	782	780	787
	Average of O&M	675	682	623	695	677
	Average of XtraCur	86	108	84	170	140
	Average of Fac&Misc	19	49	99	49	57
	Average of Total	5,217	4,464	4,784	5,327	5,133
	Average of 05 %Max Count of LE	99% 2	88% 2	89% 5	103% 15	99% 24
ES150-250	Average of Instr	2,961	3,030	3,219	3,050	3,069
	Average of Other	202	157	210	250	210
	Average of Admin	639	579	669	829	695
	Average of O&M	551	566	618	677	612
	Average of XtraCur	97	98	125	123	113
	Average of Fac&Misc	48	24	24	153	71
	Average of Total	4,504	4,463	4,891	5,098	4,783
	Average of 05 %Max Count of LE	93% 6	89% 6	101% 7	104% 9	98% 28
ES250-500	Average of Instr	2,548	2,931	3,049	3,015	2,954
	Average of Other	189	265	364	296	290
	Average of Admin	534	569	584	629	591
	Average of O&M	370	563	494	574	538
	Average of XtraCur	92	79	77	99	86
	Average of Fac&Misc	21	40	62	58	49
	Average of Total	3,756	4,477	4,644	4,682	4,527
	Average of 05 %Max Count of LE	80% 2	95% 9	98% 5	97% 9	95% 25
ES500-1000	Average of Instr	2,857	2,844	2,828	3,287	3,169
	Average of Other	123	357	554	417	399
	Average of Admin	314	554	563	647	607
	Average of O&M	582	369	593	661	613
	Average of XtraCur	74	43	69	101	89
	Average of Fac&Misc	69	104	51	39	51
	Average of Total	4,018	4,305	4,690	5,164	4,942
	Average of 05 %Max Count of LE	85% 1	94% 2	100% 1	103% 11	101% 15
ES>1000	Average of Instr	2,760	2,883	2,898	2,660	2,860
	Average of Other	421	515	470	542	481
	Average of Admin	587	468	510	620	523
	Average of O&M	666	494	572	594	571
	Average of XtraCur	77	42	45	44	46
	Average of Fac&Misc	-	35	18	70	25
	Average of Total	4,512	4,443	4,537	4,563	4,528
	Average of 05 %Max Count of LE	100% 1	98% 2	99% 12	100% 2	99% 17
Total Average of Instr		3,339	3,233	3,041	3,839	3,528
Total Average of Other		120	180	278	191	192
Total Average of Admin		695	621	605	897	771
Total Average of O&M		823	669	596	911	806
Total Average of XtraCur		59	104	99	112	100
Total Average of Fac&Misc		123	220	61	251	194
Total Average of Total		5,166	5,039	4,696	6,214	5,603
Total Average of 05 %Max		96%	93%	97%	100%	98%
Total Count of LE		41	40	41	127	249

Averaging is part but only part of the answer for declining ANB problems

Districts have experienced a wide variety of ANB changes during the 2000 to 2004 period ranging from the 868 ANB decline in the Great Falls elementary district to the 262 ANB increase in the Belgrade elementary district. Suggestions to freeze the funding of districts or to not vary it with ANB runs into problems of fair treatment and constitutional requirements for equity. If two schools arrive at the same ANB but one declines to that level while the other rises to that level both should receive the same funding. This seems logical, fair and equitable. However the data shown previously illustrates that declining districts have generally higher expenditure levels than growing districts. Possibly declining districts are stuck with a legacy of plant, administration or staffing which make it difficult to reduce expenditures while growing districts have a better opportunity to "right size" these expenses. ANB averaging can be used to extend the time allowed for districts to make the adjustments to "right size" their schools. Averaging however, in the end, gets the district funding to the reduced size.

The following table compares features of several high school districts which have converged to the same ANB level. I have chosen districts which are spending at nearly the same level, however to be more in agreement with the previous findings higher spending declining districts should be compared with lower spending growing districts however this table still illustrates the problem of legacy. Note the generally higher per ANB expenditures for administration and O&M in the declining members of the following pairs.

Name	ANB		Change	05 %Max	Total	-----Expenditure per ANB-----					
	2000	2004				Instr	Other	Admin	O&M	XtraCur	Fac&Misc
Carter County H S	64	74	10	100%	8,316	3,821	402	1,320	1,771	790	55
Garfield County H S	99	74	-25	99%	8,147	3,788	262	1,503	1,845	705	43
Harlowton H S	95	106	11	97%	7,292	3,851	510	910	982	842	160
Belt H S	132	103	-29	99%	7,605	3,816	63	1,752	1,323	651	-
Three Forks H S	153	169	16	87%	5,862	3,544	174	574	780	791	-
Cascade H S	197	165	-32	92%	5,848	3,188	289	738	1,116	504	13
Thompson Falls H S	239	301	62	91%	5,687	3,142	200	645	746	625	329
Jefferson H S	344	289	-55	90%	5,619	2,966	322	1,066	763	475	-
Belgrade H S	721	741	20	100%	5,569	2,873	406	759	953	578	-
Whitefish H S	664	712	48	100%	5,413	3,172	610	566	623	331	11
Havre H S	802	719	-83	100%	5,407	2,643	691	778	786	315	83

Adding a one-time incentive payment (in addition to averaging)

One possible method to deal with legacy issues would be to provide a "window" with some incentive aid to help districts which have experienced a significant decline and are expected to stabilize to make adjustments to "right size" their administration and facilities. For many of the smallest districts with not too distant neighboring schools

consolidation may be the move to "right size" while for larger districts it may involve consolidating facilities or building new more appropriately sized facilities and yet others which are possibly below optimal size may lack a viable option. Such an incentive could take the form of grants, bond subsidies or matching funds for activities which will improve the districts long term efficiency.

The availability of one-time funds this session makes funding such an incentive program a reasonable option for the state. For districts that consolidate saving (after the current incentive period) one basic entitlement will provide some return on the state's investment.

During the transmittal break I will look to other states to see if any good incentive programs have been implemented. I will also attempt to sort out the districts which have a viable consolidation partner from those which don't.

An observation on the basic entitlement

The basic entitlements were initially calculated for HB667 in 1993 based on earlier data about district expenditures and revised some over the intervening years to their 2004 levels of \$216,171 for high schools and \$19,456 for elementary schools. Using the information in the first and third tables in this report adjustment can be calculated which may more closely correspond to current district expenditures.

If the difference between the average expenditure in the largest districts and that in the smallest districts is to be covered by the basic entitlement the following calculations show the basic entitlements would need to increase 24%. The average size of districts in the smallest high school group was 35 ANB while for the smallest elementary group it was 11 ANB.

$(\text{Exp Largest Dist} - \text{Exp Smallest Dist}) \times (\text{Avg ANB of smallest Dist}) = \text{basic entitlement}$

For high schools:

$$\$12,847 - \$5,191 = \$7,656 \quad \text{then} \quad 7,656 \times 35 = \$267,960$$

For elementary schools:

$$\$6,730 - \$4,528 = \$2,202 \quad \text{then} \quad 7,656 \times 11 = \$24,222$$

Both these calculations generate a result which is 24 % higher than the 2004 basic entitlements. A note of caution, the actual expenditure level of small districts may be lower or higher than what would be appropriate for guiding this calculation. It may be lower if these districts are unduly restrained by the caps (even though they are soft caps) or higher if these districts to a significant degree have not completed the adjustment process (including consolidations) to operating efficiently with their reduced enrollments.