

AESD Multi-year School Infrastructure Planning Review

May 2017



Objective

- ▶ Examine existing school infrastructure in terms of:
 - ▶ Demographics and projected enrolments;
 - ▶ Resourcing;
 - ▶ Capacity and utilization

Recommend 2018 - 2019 Capital and Major Capital projects

- ▶ Major Capital Projects including Midlife Upgrades, Consolidations
- ▶ Capital Projects



AESD Demographics

- ▶ Enrolment over past 5 years
- ▶ Future Projected Enrolment
- ▶ Births
- ▶ Migration



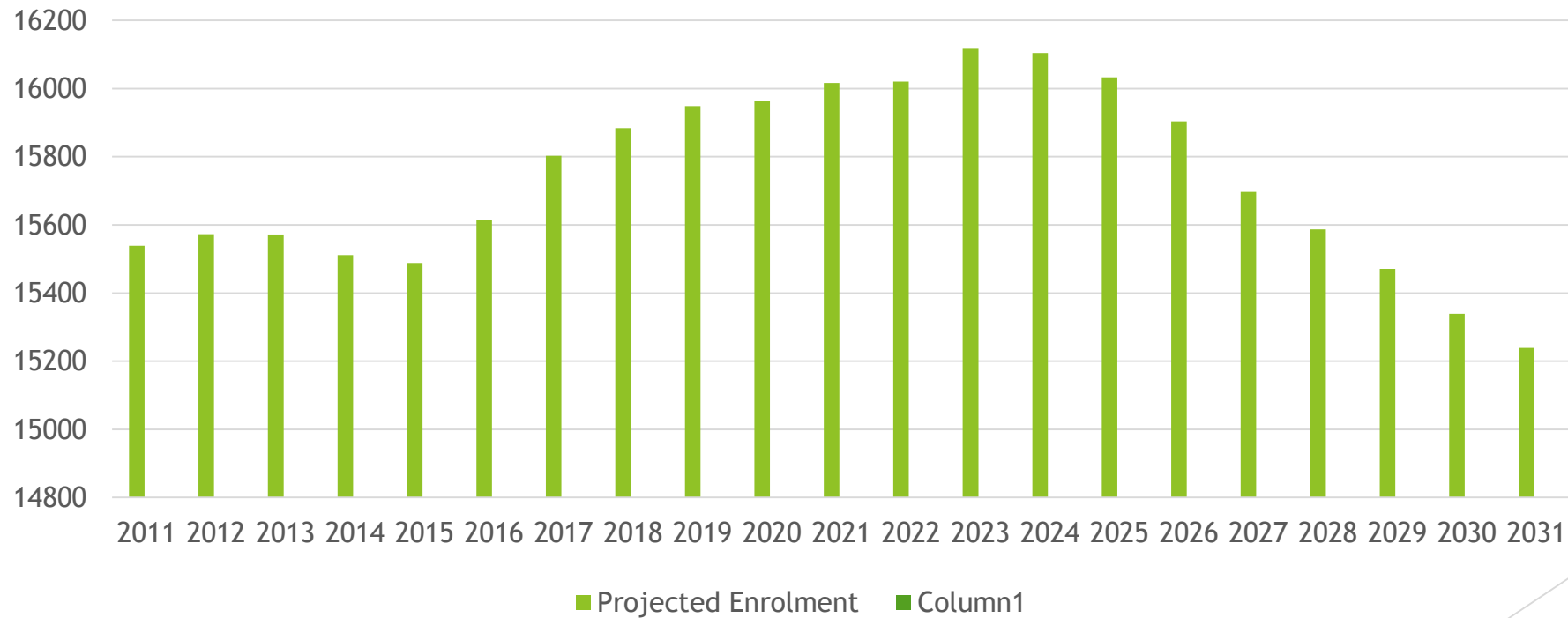
AESD Enrolment Projections

District	Enrolment Sept 2015	Enrolment Sept 2016	Change in Enrolment	% Change in Enrolment
AESD	15,488	15,614	+126	.81%

District	Enrolment Sept 2017	Enrolment Sept 2018	Change in Enrolment from 2016	% Change in Enrolment
AESD	15,803	15,884	+270	1.73%



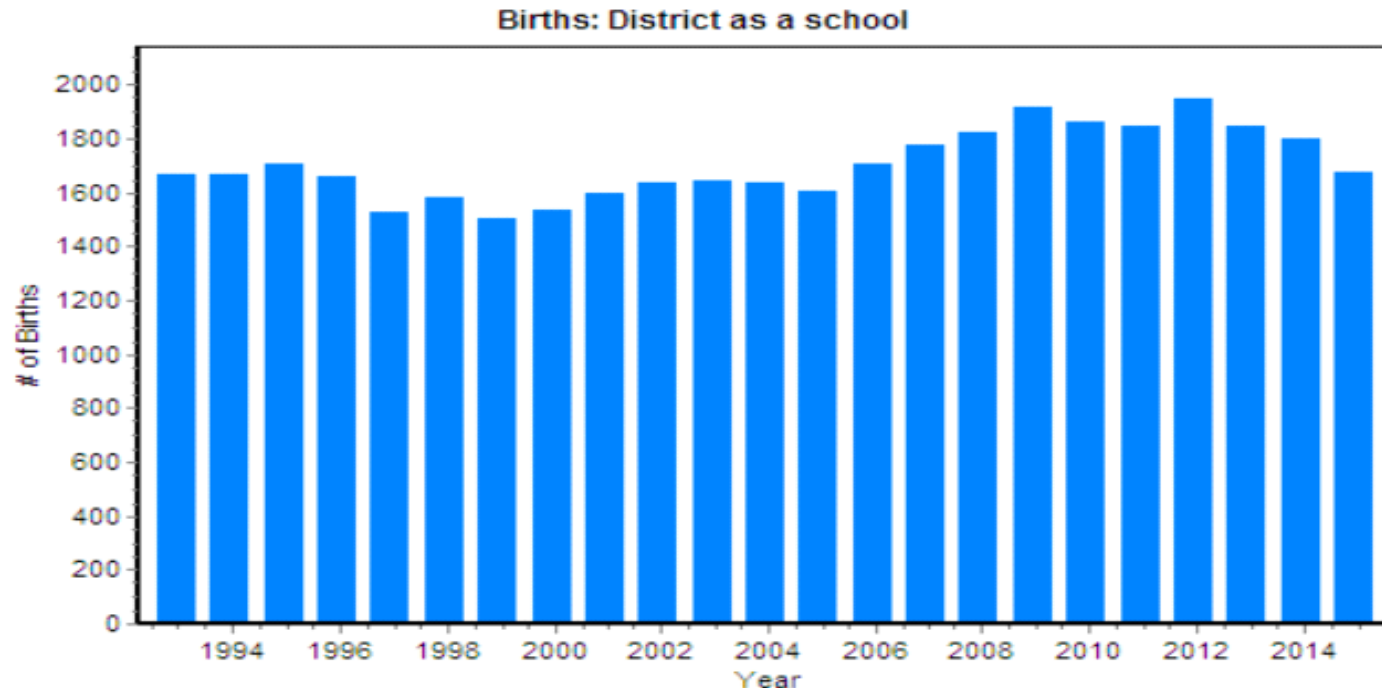
AESD Past and Projected Enrolment 2011-2031



From Baragar Systems

Births in District

- ▶ Births declined from a high of 1782 children born to mothers residing within the District in 1990, to a low of 1504 in 1999. This was followed by a generally increasing trend, with a new all-time high being realized in 2012 (1947). However, since then, the number of births have trended lower -- to just 1676 in 2015. From Baragar Systems
- ▶ The recent downward trend in births is consistent with the Statistics Canada projections but the new set of Census Canada data from 2016 may change these forecasts.



Elementary schools which had the greatest increases in women in the 25-34 age category in the 2011 census were:

- ▶ * Lou MacNarin (350 additional women, an increase of 17%)
- ▶ * Northrop Frye (+251, +77%)
- ▶ * Arnold H. McLeod (+87, +15%)
- ▶ * Riverview East (+74, +23%)
- ▶ * Edith Cavell (+62, +9%)
- ▶ * Frank L. Bowser (+42, +17%)
- ▶ 3 additional schools had large increases in women of ages 25-34, ranging from +17 to +27 (averaging +3%).
- ▶ The schools with large decreases were:
- ▶ * Forest Glen (69 fewer women, a decrease of 7%)
- ▶ * Claude D. Taylor (-56, -16%)
- ▶ 6 additional schools had large decreases of women of ages 25-34, ranging from -25 to -39 (averaging -10%).

▶ From Baragar Systems

Migration Projections

- ▶ The net impact of youth moving in and out of the District's boundary increased in 2016 to 1.53%, the highest level in last 10 years. The assumptions in this projection are for continued positive migration, varying by age group, but averaging +0.59% per year over the next 2 years and +0.48% thereafter.
- ▶ These average rates are similar to the 2 year historical averages in the near term and the 5 year historical averages for the long term. If migration is in fact higher (or lower), then enrolment will be higher (or lower) than projected.
 - ▶ From Baragar Systems

Capacity and Utilization

- ▶ Overall Capacity
- ▶ Excess Capacity
- ▶ Percentage Utilization



Overall Capacity and Utilization

	Enrolment	Capacity	Excess Capacity	Utilization
Anglophone*	68,922	116,161	47,239	59%
AESD	15,624	23,784	8,308	66%
*Data from EECD 2016Summary Statistics				



Capacity and Utilization



- ▶ Capacity = Avg. class size * Teaching Stations
- ▶ Identified number of teaching stations
 - ▶ Elementary: Includes classrooms and excludes specialized instructional classrooms (e.g. music room)
 - ▶ Middle: Includes classrooms and excludes specialized instructional classrooms (e.g. music, arts, family studies, technology and sciences)
 - ▶ High School: all instructional space included in capacity (e.g. classrooms, labs, physical education, art etc.)
 - ▶ Applied 80% factor at High School to reflect impact of all types of courses and variability in student course selection

Capacity and Utilization

- ▶ Number of students per teaching station based on maximums established in collective agreement
 - ▶ K-2 21
 - ▶ 3 26
 - ▶ 4-6 28
 - ▶ 7-12 29
- ▶ Overall capacity indicates number of students a given school could hold if all classes were at maximum capacity based on above.



School Capacity

School	Teaching Stations	Factor Applied	Average Maximum	Capacity
Arnold H. McLeod School *	17		23.4	398
Beaverbrook School **	18		26.7	481
Bernice MacNaughton High School	49	80%	29	1137
Bessborough School	25		25.7	643
Birchmount School	27		25.7	694
Caledonia Regional High School	38	80%	28.5	866
Claude D. Taylor School	24		24.2	581
Dorchester Consolidated School	12		25.7	308
Edith Cavell School	22		25.7	565
Evergreen Park School	36		25.7	925
Forest Glen School	20		23.4	468
Frank L. Bowser School	18		24.2	436

School Capacity

School	Teaching Stations	Factor Applied	Average Maximum	Capacity
Harrison Trimble High School	67	80%	29	1554
Havelock School	6		24.2	145
Hillcrest School	13		25.7	334
Hillsborough Elementary School	11		24.2	266
JMA Armstrong-Salisbury Middle	42	80%	28.5	958
Lewisville Middle School	18		28.5	513
Lou MacNarin School	26		24.2	629
Magnetic Hill School	24		25.7	617
Marshview Middle School	22		28.5	627
Moncton High School	56	80%	29	1299
Mountain View School	6		24.2	145
Northop Frye	27		25.7	694
Petitcodiac Regional School***	44	80%	26.7	1071
Port Elgin Regional School	15		25.7	386

School Capacity

School	Teaching Stations	Factor Applied	Average Maximum	Capacity
Queen Elizabeth School	26		25.7	668
Riverside Consolidated School	10		24.2	242
Riverview East School	27		25.7	694
Riverview High School	59	80%	29	1369
Riverview Middle School	33		28.5	941
Salem Elementary School	20		23.4	468
Salisbury Elementary School	17		23.4	398
Shediac Cape School	15		25.7	386
Sunny Brae Middle School	14		28.5	399
Tantramar Regional High School	44	80%	29	1021
West Riverview School	19		24.2	460

Excess Capacity and Utilization Sept 30/16

School	Capacity	Enrolment	Excess Capacity	% Utilization
Arnold H. McLeod School *	398	324	74	81.4%
Beaverbrook School **	481	381	100	79.2%
Bernice MacNaughton High School	1137	818	319	71.9%
Bessborough School	643	475	168	73.9%
Birchmount School	694	484	210	69.7%
Caledonia Regional High School	866	255	611	29.4%
Claude D. Taylor School	581	301	280	51.8%
Dorchester Consolidated School	308	58	250	18.8%
Edith Cavell School	565	279	286	49.4%
Evergreen Park School	925	780	145	84.3%
Forest Glen School	468	294	174	62.8%
Frank L. Bowser School	436	315	121	72.2%

Excess Capacity and Utilization Sept 30/16

School	Capacity	Enrolment	Excess Capacity	% Utilization
Harrison Trimble High School	1554	935	619	60.2%
Havelock School	145	127	18	87.6%
Hillcrest School	334	165	169	49.4%
Hillsborough Elementary School	266	163	103	61.3%
JMA Armstrong-Salisbury Middle	958	602	356	62.8%
Lewisville Middle School	513	350	163	68.2%
Lou MacNarin School	629	367	262	58.3%
Magnetic Hill School	617	400	217	64.8%
Marshview Middle School	627	240	387	38.3%
Moncton High School	1299	1185	114	91.2%
Mountain View School	145	108	37	74.5%
Northop Frye	694	765	-71	110.2%
Petitcodiac Regional School***	1071	598	473	55.8%

Excess Capacity and Utilization Sept 30/16

School	Capacity	Enrolment	Excess Capacity	% Utilization
Port Elgin Regional School	386	169	217	43.8%
Queen Elizabeth School	668	364	304	54.5%
Riverside Consolidated School	242	52	190	21.5%
Riverview East School	694	609	85	87.8%
Riverview High School	1369	1096	273	80.1%
Riverview Middle School	941	527	414	56.0%
Salem Elementary School	468	367	101	78.4%
Salisbury Elementary School	398	372	26	93.5%
Shediac Cape School	386	267	119	69.2%
Sunny Brae Middle School	399	301	98	75.4%
Tantramar Regional High School	1021	426	595	41.7%
West Riverview School	460	305	155	66.3%

Deferred Maintenance Costs May 1, 2017

- ▶ Deferred maintenance - Capital Items on School Physical Plant Database
- ▶ There are 457 projects identified on the list at apx \$60,792,600.00
- ▶ Capital projects are identified by:
 - ▶ Facilities Department
 - ▶ School Principals and Custodians
 - ▶ 3rd Party Inspectors
 - ▶ EECD
 - ▶ DTI



Deferred Maintenance Costs

School	Deferred Maintenance Cost	Square Meters
Arnold H. McLeod School *	1,522,000	3098.00
Beaverbrook School **	3,224,000	4359.00
Bernice MacNaughton High School	1,237,000	15107.00
Bessborough School	2,623,600	5694.00
Birchmount School	3,196,000	5552.00
Caledonia Regional High School	2,340,000	7296.00
Claude D. Taylor School	2,267,000	4691.00
Dorchester Consolidated School	1,812,000	2322.00
Edith Cavell School	732,000	5908.00
Evergreen Park School	0	7850.00
Forest Glen School	1,632,000	3463.00
Frank L. Bowser School	2,131,000	3734.00

Deferred Maintenance Costs

School	Deferred Maintenance Cost	Square Meters
Harrison Trimble High School	2,305,000	15653.00
Havelock School	0	1780.00
Hillcrest School	2,088,000	3594.00
Hillsborough Elementary School	1,466,000	2425.00
JMA Armstrong-Salisbury Middle	2,671,000	8983.00
Lewisville Middle School	2,025,000	6008.00
Lou MacNarin School	165,000	6121.00
Magnetic Hill School	723,000	5109.00
Marshview Middle School	2,474,000	7245.00
Moncton High School	0	17,391
Mountain View School	901,000	1142.00
Northop Frye	0	9003.00
Petitcodiac Regional School***	2,567,000	8122.00

Deferred Maintenance Costs

School	Deferred Maintenance Cost	Square Meters
Port Elgin Regional School	1,598,000	3590.00
Queen Elizabeth School	977,000	5196.00
Riverside Consolidated School	1,205,000	2269.00
Riverview East School	0	10228
Riverview High School	3,548,000	17230.00
Riverview Middle School	3,121,000	12423.00
Salem Elementary School	1,450,000	4353.00
Salisbury Elementary School	2,055,000	4582.00
Shediac Cape School	435,000	3939.00
Sunny Brae Middle School	2,740,000	3973.00
Tantramar Regional High School	1,995,000	13482.00
West Riverview School	1,927,000	3439.00

Major Capital Projects

- ▶ Large projects that are often multi-year in scope
- ▶ Are usually projects of a \$1,000,000 or more and funded over many fiscal periods
- ▶ Include:
 - ▶ New Additions
 - ▶ New Schools
 - ▶ Midlife Upgrades
- ▶ There are two projects that are under current study for next year's Major Capital considerations. Tantramar region and Elmwood Drive area.



AESD Major Capital Projects Approved 17/18

School	Project	Budget Amount Approved for 2017/18	Equipment Budget 2017/18
North End Middle School	New School	\$1.4 M	
HTHS	Midlife Upgrade	\$2.4 M	\$100 K
Birchmount School	Building Assessment Study	\$50 K	
Petitcodiac Shops Addition	Addition	\$100 K	



AEED Major Capital Projects Requests 18/19

School	Project	Deferred Maintenance	Enrollment Projections 2030	Long Term Need in Community
Bessborough School	New School	2,623,600	Growth	Yes
Salisbury Elementary School	New School	2,055,000	Stable	Yes
Riverview High School	Midlife Upgrade - Submitted last 2 years	3,548,000	Small Decline	Yes
Riverview East	Addition for growth	0	Growth	Yes



Capital Projects



- ▶ The District prioritizes projects based on
 - ▶ Priority #1 - relates to occupant health and safety, facility shutdown and asset loss or deterioration.
 - ▶ Priority #2 - essential work that may have major repercussions on and/or is detrimental to the functioning of the school and/or the comfort of the occupants, but which does not represent any danger to health and/or safety.
 - ▶ Priority #3 - important work that may have certain repercussions on and/or is detrimental to the functioning of the school and/or the comfort of the occupants but which does not represent any danger to health and/or safety.
- ▶ Capital Projects are \$1,000,000 or less and funded over one fiscal period
- ▶ Include:
 - ▶ Roof replacements
 - ▶ Mechanical and Electrical
 - ▶ Building Envelop Exterior
 - ▶ Building Interior
 - ▶ Fire Codes



AESD Capital Projects Recommended 18/19

School	Project	Estimated Cost	District Priority
Beaverbrook School (ASD-E)	Lift	\$400,000.00	1
Hillsborough Elementary School (ASD-E)	Lift	\$250,000.00	2
Magnetic Hill School (ASD-E)	Washrooms	\$250,000.00	3
Salem Elementary School (ASD-E)	Washrooms	\$230,000.00	4
Claude D. Taylor School (ASD-E)	Washrooms	\$450,000.00	5
Lewisville Middle School (ASD-E)	Washrooms	\$240,000.00	5
Port Elgin Regional School (ASD-E)	Exterior Windows	\$480,000.00	7
J.M.A. Armstrong/Salisbury Middle School (ASD-E)	Replace leaking cooling tower.	\$120,000.00	8
J.M.A. Armstrong/Salisbury Middle School (ASD-E)	Site Improvement	\$450,000.00	9
Claude D. Taylor School (ASD-E)	Heating and Ventillation Maintenance	\$696,000.00	10
Total		3,566,000	



AESD Roof Projects Recommended 18/19

School	Project	Estimated Cost	District Priority
Port Elgin Regional School (ASD-E)	Roof Replacement	\$165,000.00	11
Salem Elementary School (ASD-E)	Roof Replacement	\$450,000.00	12
Riverside Consolidated School (ASD-E)	Roof Replacement	\$15,000.00	13
Caledonia Regional High School (ASD-E)	Roof Replacement	\$240,000.00	14
Claude D. Taylor School (ASD-E)	Roof Replacement	\$325,000.00	20
Claude D. Taylor School (ASD-E)	Roof Replacement	\$10,000.00	22
J.M.A. Armstrong/Salisbury Middle School (ASD-E)	Roof Replacement	\$110,000.00	25
Salem Elementary School (ASD-E)	Roof Replacement	\$48,000.00	26
J.M.A. Armstrong/Salisbury Middle School (ASD-E)	Roof Replacement	\$115,000	27
TOTAL		\$1,478,000	



Operational Feasibility Studies for Consideration

- ▶ There is a potential project that would benefit from a consultants review to determine the operational feasibility and the fiscal payback of consolidating schools.
- ▶ Project - Consolidate Riverview Middle with Frank L. Bowser and build a new K-8 school.
- ▶ Both facilities are old and lacking modern day curriculum standards.
- ▶ There is \$5,252,000 in outstanding deferred maintenance projects.
- ▶ Combined enrollment today is 842. Ten year projection enrollment settles at 748 going forward.