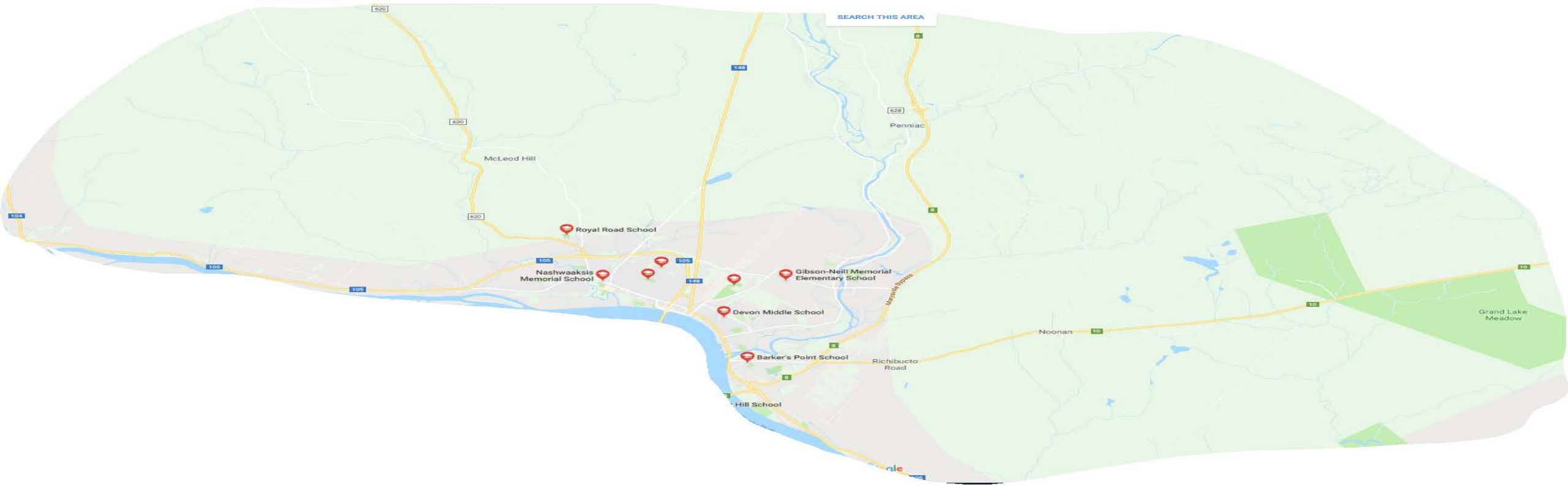




# Sustainability Study Elementary Schools on the Northside of Fredericton



# History

- DEC wanted to examine the current structure and enrollment data of elementary schools on the north side of Fredericton
- The Director of Finance and Administration, along with his team have compiled the following facts and have included recommendations to the DEC



# Background

- There are currently six elementary schools on the north side of Fredericton that were considered in this study. Barker's Point Elementary School, Gibson Neill Memorial Elementary School, McAdam Avenue Elementary School, Nashwaaksis Memorial School, Park Street Elementary School and Royal Road Elementary School.
- The current school structures have a combined functional capacity of 83% (current enrolment of 2129). Schools are considered full when they reach 80% (2054 students). The District notes that the north side of Fredericton is projected to continue to grow in the future.
- There are currently nine mobile classrooms located at these six schools.



# Enrolment Projections

Year	Projection 1 (Assuming no net migration)						Total
	K	1	2	3	4	5	
2016-17	345	367	394	358	354	311	2129
2017-18	322	345	367	394	358	354	2140
2018-19	330	322	345	367	394	358	2116
2019-20	298	330	322	345	367	394	2056
2020-21	310	298	330	322	345	367	1972
2021-22	345	310	298	330	322	345	1950
2022-23	348	345	310	298	330	322	1953
2023-24	362	348	345	310	298	330	1993
2024-25	373	362	348	345	310	298	2036
2025-26	379	373	362	348	345	310	2117
2026-27	381	379	373	362	348	345	2188

Year	Projection 1 (Assuming 2% net migration)						Total
	K	1	2	3	4	5	
2016-17	345	367	394	358	354	311	2129
2017-18	348	352	374	402	365	361	2203
2018-19	357	355	359	382	410	372	2236
2019-20	322	364	362	366	389	418	2223
2020-21	335	329	371	370	373	397	2176
2021-22	373	342	335	379	377	381	2188
2022-23	377	381	349	342	386	385	2220
2023-24	392	384	388	356	349	394	2263
2024-25	404	400	392	396	363	356	2310
2025-26	410	412	408	400	404	370	2403
2026-27	412	418	420	416	408	412	2486

Year	Projection 1 (Extrapolated city projections)						Total
	K	1	2	3	4	5	
2016-17	312	320	309	316	306	281	1844
2017-18	319	326	332	319	327	310	1933
2018-19	338	332	339	341	330	331	2011
2019-20	361	351	344	348	352	333	2089
2020-21	381	374	363	353	359	355	2185
2021-22	399	395	387	372	364	362	2279
2022-23	413	413	409	397	383	367	2382
2023-24	427	428	427	419	408	386	2495
2024-25	438	443	442	438	431	411	2603
2025-26	445	454	458	453	450	434	2694
2026-27	447	462	470	469	467	454	2769

Based on EY Report on forecasted Births from city projections  
 Based on birth rates for year (forwarded to when they should start school)  
 Actual September 2016 Enrolment



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Prepared.*

# Barker's Point Elementary School

## Barker's Point School Total Enrolment by Grade

Enrolment Year	K	1	2	3	4	5	Total
2011-12	53	62	59	58	48	71	351
2012-13	54	47	61	56	52	45	315
2013-14	76	59	47	63	47	50	342
2014-15	59	71	61	47	58	55	351
2015-16	57	59	71	56	46	56	345

## Barker's Point Elementary School

### Functional Capacity

100%	80%	2016-17 Enrolment	Over/Under 80%
432	346	347	<b>1</b>

## Operational Costs

Electricity	\$	46,720.04
Water/Sewage	\$	3,148.16
Garbage Removal	\$	1,666.44
Snow Plowing	\$	7,077.84
Heating Fuel	\$	17,560.34
Natural Gas	\$	-
Cleaning Supplies/Services	\$	5,571.70
Minor Repairs/Renovations	\$	14,555.47
<b>Total</b>	<b>\$</b>	<b>96,299.99</b>
Operational Costs Per Square Meter		\$ 26.82
Based on: 3590 Sq Meters		
Operational Costs Per Student		\$ 277.52
Based on: 347 Enrollment		



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# Gibson Neill Memorial Elementary School

## Gibson Neill Elementary School

### Total Enrolment by Grade

Enrolment Year	K	1	2	3	4	5	Total
2011-12	79	93	88	88	83	70	501
2012-13	88	85	96	87	86	79	521
2013-14	101	97	85	97	95	90	565
2014-15	120	107	91	89	100	91	598
2015-16	101	113	109	92	87	104	606

## Gibson Neill Memorial Elementary School

### Functional Capacity

100%	80%	2016-17 Enrolment	Over/Under 80%
624	499	615	<b>116</b>

## Operational Costs

Electricity	\$	61,705.05
Water/Sewage	\$	8,149.67
Garbage Removal	\$	2,748.24
Snow Plowing	\$	15,277.80
Heating Fuel	\$	-
Natural Gas	\$	47,050.89
Cleaning Supplies/Services	\$	13,427.64
Minor Repairs/Renovations	\$	6,965.07
<b>Total</b>	<b>\$</b>	<b>155,324.36</b>

**Operational Costs Per Square Meter** \$ 21.22

Based on: 7318 Sq Meters

**Operational Costs Per Student** \$ 252.56

Based on: 615 Enrollment



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# McAdam Avenue Elementary School

McAdam Avenue School Total Enrolment by Grade								McAdam Avenue Elementary School Functional Capacity			
Enrolment Year	K	1	2	3	4	5	Total	100%	80%	2016-17 Enrolment	Over/Under 80%
2011-12	19	19	18	11	18	13	98				
2012-13	11	14	17	13	13	17	85				
2013-14	12	11	14	17	13	11	78				
2014-15	16	10	14	11	17	15	83	216	173	74	-99
2015-16	14	16	9	11	11	18	79				

## Operational Costs

Electricity	\$	5,544.68
Water/Sewage	\$	795.04
Garbage Removal	\$	380.04
Snow Plowing	\$	6,522.78
Heating Fuel	\$	-
Natural Gas	\$	13,644.85
Cleaning Supplies/Services	\$	1,274.77
Minor Repairs/Renovations	\$	7,596.80
<b>Total</b>	<b>\$</b>	<b>35,758.96</b>

**Operational Costs Per Square Meter** \$ 24.82

Based on: 1441 Sq Meters

**Operational Costs Per Student** \$ 483.23

Based on: 74 Enrollment



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# Nashwaaksis Memorial School

## Nashwaaksis Memorial School Total Enrolment by Grade

Enrolment Year	K	1	2	3	4	5	Total
2011-12	37	49	37	33	39	41	236
2012-13	51	30	42	26	31	31	211
2013-14	43	49	32	42	27	32	225
2014-15	45	43	48	36	41	34	247
2015-16	66	45	45	44	34	38	272

## Nashwaaksis Memorial Elementary School Functional Capacity

100%	80%	2016-17 Enrolment	Over/Under 80%
336	269	280	11

## Operational Costs

Electricity	\$	42,329.63
Water/Sewage	\$	3,417.52
Garbage Removal	\$	1,096.32
Snow Plowing	\$	23,277.78
Heating Fuel	\$	-
Natural Gas	\$	-
Cleaning Supplies/Services	\$	7,224.38
Minor Repairs/Renovations	\$	17,537.64
<b>Total</b>	<b>\$</b>	<b>94,883.27</b>

**Operational Costs Per Square Meter** \$ 26.71

Based on: 2910 Sq Meters

**Operational Costs Per Student** \$ 277.56

Based on: 280 Enrollment



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# Park Street Elementary School

## Park Street Elementary School Total Enrolment by Grade

Enrolment Year	K	1	2	3	4	5	Total
2011-12	53	73	61	83	73	83	426
2012-13	62	57	75	70	84	77	425
2013-14	67	63	58	80	70	83	421
2014-15	68	64	63	51	78	71	395
2015-16	63	74	62	70	49	77	395

## Park Street Elementary School Functional Capacity

100%	80%	2016-17 Enrolment	Over/Under 80%
504	403	408	5

## Operational Costs

Electricity	\$	33,242.19
Water/Sewage	\$	4,372.24
Garbage Removal	\$	2,051.40
Snow Plowing	\$	11,664.72
Heating Fuel	\$	-
Natural Gas	\$	35,838.23
Cleaning Supplies/Services	\$	8,933.47
Minor Repairs/Renovations	\$	11,898.71
<b>Total</b>	<b>\$</b>	<b>108,000.96</b>

**Operational Costs Per Square Meter** \$ 26.12

Based on: 4135 Sq Meters

**Operational Costs Per Student** \$ 264.71

Based on: 408 Enrollment



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# Royal Road Elementary School

## Royal Road Elementary School Total Enrolment by Grade

Enrolment Year	K	1	2	3	4	5	Total
2011-12	69	63	56	73	68	65	394
2012-13	80	71	70	55	82	74	432
2013-14	64	75	70	64	59	81	413
2014-15	72	55	80	67	62	55	391
2015-16	63	71	56	81	76	66	413

## Royal Road Elementary School Functional Capacity

100%	80%	2016-17 Enrolment	Over/Under 80%
456	365	405	<b>40</b>

## Operational Costs

Electricity	\$	72,314.46
Water/Sewage	\$	4,533.28
Garbage Removal	\$	2,032.08
Snow Plowing	\$	14,765.22
Heating Fuel	\$	-
Natural Gas	\$	-
Cleaning Supplies/Services	\$	2,311.45
Minor Repairs/Renovations	\$	8,003.79
<b>Total</b>	<b>\$</b>	<b>103,960.28</b>

**Operational Costs Per Square Meter** \$ 24.20  
Based on: 4295 Sq Meters

**Operational Costs Per Student** \$ 256.69  
Based on: 405 Enrollment



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# Recommendations

- Based on the fact that the current structures are over their combined functional capacity, we feel it is necessary for the addition of two new elementary schools on the north side of Fredericton.
- Our proposed locations would balance the student populations amongst existing schools and allow for future growth in the north side area.



# New Elementary School in the McAdam Avenue area – Potential School Boundary (students in red)



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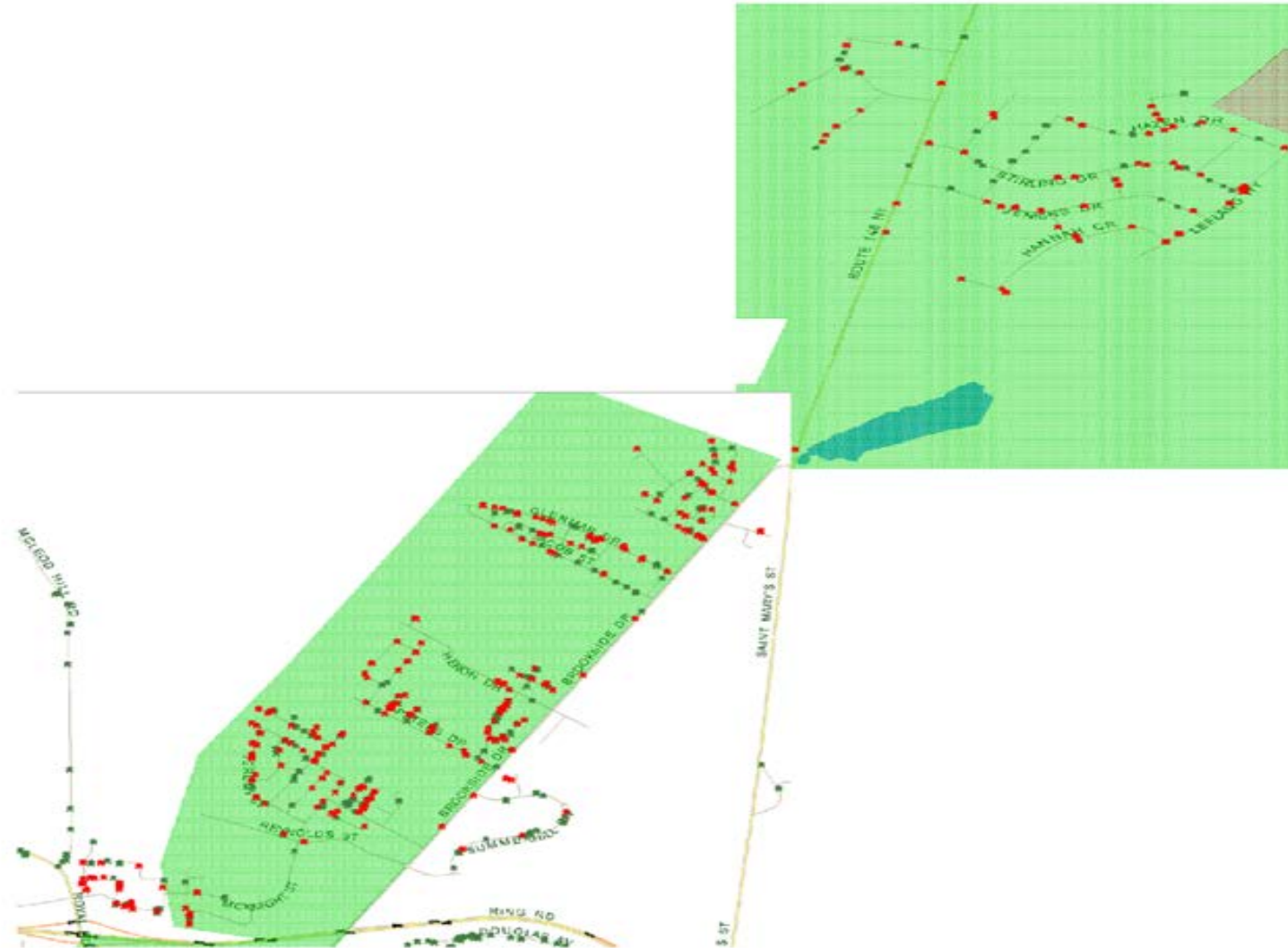


# New Elementary School in the McAdam Avenue area

- Standard elementary schools are designed with a functional capacity of 500 students when at 100% capacity (400 students at 80%).
- The proposed boundary would see approximately 357 students zoned for this school, giving it a functional capacity of 71%.
- Depending on location, there is potential for many of these students continuing to be walkers (under 2.4km from the school).



# New Elementary School in the Kilarney Lake area – Potential School Boundary (students in red)



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# New Elementary School in the Kilarney Lake area

- Standard elementary schools are designed with a functional capacity of 500 students when at 100% capacity (400 students at 80%).
- The proposed boundary would see approximately 363 students zoned for this school, giving it a functional capacity of 73%.
- Depending on location, there is potential for many of these students becoming eligible walkers (under 2.4km from the school).





# Impact on Other Schools

- These scenarios would see a recommendation of closing or addition to the current McAdam Avenue Elementary School and the closure of Nashwaaksis Memorial School.
- It would also alleviate a lot of the overcrowding at the six elementary schools.
- Most of the nine portable classrooms currently in place, would be removed.





# Impact on School Enrolments and Functional Capacities

	<b>2016-17 Enrolment</b>	<b>2016-17 Functional Capacity</b>
Barker's Point Elementary School	347	80%
Gibson Neill Memorial Elementary School	615	99%
Park Street Elementary School	408	81%
Royal Road Elementary School	405	89%
McAdam Avenue Elementary School	74	34%
NashWaaksis Memorial Elementary School	280	83%

	<b>Proposed Enrolment</b>	<b>Proposed Functional Capacity</b>
Barker's Point Elementary School	345	80%
Gibson Neill Memorial Elementary School	481	77%
Park Street Elementary School	286	57%
Royal Road Elementary School	356	78%
New McAdam Avenue area Elementary School	357	71%
New Kilarney Road area Elementary School	363	73%



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# Recap

- Our current schools would achieve the 80% functional capacity mark when their student enrolments reached 2054 students. Currently the student enrolment for these schools is 2129 students, with a functional capacity of 83%. The addition of the two proposed new schools would see the 80% functional capacity increased to 2412 students. Using the current enrollment, the functional capacity would be at 71% (with no new growth).
- These proposed school boundaries have all elementary schools at an 80% functional capacity or less, with only one being below the “optimal 60 – 80%” mark.
- Allows for room at PSES for future boundary changes to a more centralized location on the north side. I.e. Should GNMES continue to grow, you could easily add students into PSES.
- This should see most portable classrooms (with exception of BPES), removed.



# Questions



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