

UNEDITED
VERSION

**EASTERN SCHOOL DISTRICT
FACILITIES REVIEW**

■ ■ ■ ■ ■

BRIEF

Prepared for:

EASTERN SCHOOL DISTRICT

Prepared by:
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in association with

COLES ASSOCIATES LTD.
Architects and Engineers

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EASTERN SCHOOL DISTRICT FACILITY REVIEW BRIEF

INTRODUCTION

The purpose of this brief is to provide in condensed form, the salient issues presented in the report. The background information and appendices have not been included.

This brief is provided as a summary of the Eastern School District Facility Review Report. The full report is a document comprised of five parts including:

- the report,
- Appendix A including school summaries for each of the individual schools in the Eastern School District,
- Appendix B including basic school data,
- Appendix C including basic school data represented in graphic form,
- Appendix D including maps showing school locations, existing and proposed zoning, and
- Appendix E including Eastern School District Policies on permanent school closure, school attendance zones and student transportation services

A full report is available for viewing at each of the two School Board offices in Charlottetown at 24 Linden Avenue and in Montague 35 Douses Rd and at each of the 43 school buildings in the Eastern School District.

For reference the contents of the appendices are as follows:

APPENDIX A

DISTRICT ENROLLMENTS

SCHOOL SUMMARIES

High Schools

Bluefield High School
Charlottetown Rural High School
Colonel Gray Senior High School
Montague Regional High School
Morell Regional High School
Souris Regional High School

Intermediate Schools

Birchwood Intermediate High School
East Wiltshire Intermediate High School
Montague Intermediate School
Queen Charlotte Intermediate High School

Rollo Bay Consolidated School
Stonepark Intermediate School

Elementary Schools

Belfast Consolidated School
Cardigan Consolidated School
Central Queens Elementary School
Dundas Consolidated School
Eastern Kings Consolidated School
Eliot River Elementary School
Englewood Elementary School
Fort Augustus Elementary School
Fortune Consolidated School
Georgetown Elementary School
Glen Stewart Elementary School
Grand Tracadie Elementary School
Gulf Shore Consolidated School
L. M. Montgomery Elementary School
Montague Consolidated School
Morell Consolidated School
Mt. Stewart Consolidated School
Parkdale Elementary School
Prince Street Elementary School
Souris Consolidated School
St. Jean Elementary School
St. Peter's Elementary School
St. Teresa's Elementary School
Sherwood Elementary School
Southern Kings Consolidated School
Spring Park Elementary School
Tracadie Cross Consolidated School
Vernon River Consolidated School
West Kent Elementary School
West Royalty Elementary School
Westwood Elementary School
School Board Office

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APPENDIX B DATA

APPENDIX C GRAPHS

Square feet of Building per Student
Capacity versus Enrollment
Annual Average Building & Maintenance
Costs
Annual Average Electrical Costs
Annual Average Fuel Costs
Annual Average Total Operating &
Maintenance Costs
Utilization Rate
Average Costs by Fiscal Year
Births in Prince Edward Island 1985 to 1995

APPENDIX D MAPS

Eastern School District Area
Existing School Location Map, Eastern
District
Existing School Location Map,
Charlottetown
Existing Elementary School Zoning, Eastern
District
Existing Elementary School Zoning,
Charlottetown
Replanned Elementary School Zoning,
Eastern District
Replanned Elementary School Zoning,
Charlottetown
Existing Senior High School Zoning, Eastern
District
Replanned Senior High School Zoning,
Eastern District

APPENDIX E POLICIES

Permanent School Closure Policy
School Attendance Zones Policy
Student Transportation Services Policy

EXECUTIVE SUMMARY

The mission statement of the Eastern School District is:

The Eastern School District is committed to excellence in education. In partnership with the community, we will provide a safe and caring learning environment in which all students have the opportunity to reach their potential and to face the future with confidence.

- It has become apparent to the Eastern School Board and Provincial Government that financial resources are limited. It is a fact that the Eastern School Board operates with an annual deficit. To continue on the current financial course is not an option. As a result, this Review was commissioned in an effort to identify realistic options for corrective action available to the Board.

As a guiding principal, consistent with the mission statement and in the context of financial reality, the authors have undertaken this Review bearing in mind the objective

to provide the best possible educational opportunity for each student who attends school in the Eastern School District within the financial resources available.

- As a result of this Review, we have become aware that we have between 2500 and 3000 seats available for students in the Eastern School District that are not utilized. Simply put, the school buildings are under-utilized. Unfortunately, a large number of these seats are not located where the student population now resides. Many of the space related issues can be improved in conjunction with transportation adjustments.
- A number of space requirements have been identified which require attention. Longer-term

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solutions to identified inequities will require additions to existing buildings

- While the Eastern School District has some buildings that are in substandard condition, the general condition of our buildings is good. Recommendations are made to correct deficiencies.
- Through the review process, issues relating to the operation and maintenance of the school buildings have been identified for improvement. The purpose of the buildings is to serve the needs of the education program. Recommendations are made to enhance the performance of the building and its systems, thereby freeing additional dollars for program related requirements.
- The transportation system and allocation of students to schools has become cumbersome, inefficient and unnecessarily costly. The bus service can readily be improved in conjunction with school zoning in order that the maximum of financial resources may be directed to the students in school and not getting them to school. This Review has identified areas in the transportation system where significant financial savings can be realized immediately with no negative impact on classroom resources.
- Our school system must address the need to provide the resources necessary to develop essential skills required to respond to a rapidly changing world. In order that a school be in a position to offer a cost effective, basic program, a minimum enrollment at each school is required. While most schools are of sufficient size, a number do not allow for cost effective use of staff and resources.
- Early in the Review it became apparent there was no effective tool which allowed for reliable planning. As a means to gain control of demographic data for planning purposes, a

computer software program capable of recording and identifying options for trends in student demographic data was purchased. This software allows identification of students in the Eastern District, where they live and where they go to school. The continued updating of this data set will enable the Eastern School District to plan with confidence the physical resources and transportation needs, looking into the future, for at least a five year period. This program is also engaged to provide routing information for the transportation system.

- The situations that now exist in this District have come about as a result of many decisions made over the years, although the Eastern School District has only been in existence for 2½ years.
- This Review is not seen as an end point, but rather the beginning of an on-going process to better monitor and control all facilities required in order to provide cost-effective support services necessary to the effective education of our children.
- This Review has been greatly assisted by the complete cooperation of all Eastern School District employees. It is clear from the meetings, discussions and input provided by all partners in the education process that every effort should be made to protect and enhance the opportunity for the students in our classrooms.
- The recommendations in this Review address these identified concerns and provide a realistic and achievable avenue that enables the goal to become a reality in the short term.
- The recommendations put forth in this Review also offer a responsible process whereby this District can begin to deal with the inefficiencies that have been identified. All present school jurisdictions within the District will share in this process to bring to our students a better opportunity for learning.

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EASTERN SCHOOL DISTRICT FACILITY REVIEW BRIEF

PURPOSE OF THE FACILITY REVIEW

The Eastern School District is currently operating at a financial deficit. The District has been advised by the Provincial Government that no additional funds are available to cover the deficit. Where it is the goal of the Eastern School District School Board to provide the best possible educational opportunity for each student who attends school in the Eastern School District within the financial resources available, operational inefficiencies are a prime sector to explore with a view to reducing unnecessary costs.

The small school assistance program which was introduced in 1989-90 was totally phased of in 1995-96. Beginning in 1991-92 the school board operating budget was subject to budget reductions each year using the budget of July 1, 1990 as the base budget. These two factors meant that the board had to operate significantly with less dollars each year. The tables below indicate the actual reductions in each area since the 1990 school year.

Small School Assistance Revenue

1989-90	\$337,000
1990-91	\$362,900
1991-92	\$321,500
1992-93	\$276,300
1993-94	\$142,000
1994-95	\$ 72,600
1995-96	\$ 0

Eastern School District Budget Reductions Base Budget Year July 1, 1990

1991-92	\$ 154,100
1992-93	\$ 114,400
1993-94	\$ 345,300
1994-95	\$ 776,900
1995-96	\$1,208,500
1996-97	\$ 891,500

It is appropriate to undertake a review to identify operational opportunities for cost savings which would not affect classroom resources which in turn would have a negative impact on the education of our students.

The demographics of the District have changed over the past several decades since many of the 43 schools were put into service as have the effective catchment areas for each of the schools.

It is appropriate to review the current demographics of the District, to project trends in the short term demographic data and to put the demographics in the context of the existing school locations, their capacity to provide the necessary space and services to the student population and the efficiency and ability of the transportation system to respond in a cost effective manner to the District transportation needs.

The operation of the Eastern School District requires the complex management of physical facilities (school buildings), student demographics, curriculum, professional and support staff and transportation systems. There are inter-related relationships between many of these requirements which cannot simply be looked at in isolation.

It is appropriate to review the facilities including student demographics, transportation and physical facilities in the context of each other to identify related problems and pose realistic and achievable solutions.

The relationship between the mode of transportation to schools, the size and location of schools and the size and location of the student population has over the past decades and will continue to evolve.

It is appropriate to review the transportation system with a view to rationalizing the network in order to offer a cost effective service.

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Building maintenance and operational expenses are a critical to the successful operation the Eastern School. At present the District operates in excess of two million square feet of building area.

It is appropriate to undertake a review of the school facilities in order to identify potential building operational inefficiencies. In the long term it is important to understand the overall condition, usage and operational costs of the facilities in order that appropriate planning and financial resources can be identified so as to minimize operational expense.

Regulations, codes and building standards governing the construction of architectural, structural, mechanical and electrical systems for school buildings have changed dramatically over the life span of many of the buildings under review

In making the decision of whether to proceed with upgrading a building to the existing condition the buildings and its functional role in the overall network of schools must be considered. Conversely, in evaluating the network of schools for ongoing service it is important to ensure each school is sound and suitable for ongoing service.

It is appropriate to undertake a review given the varied ages of the District buildings, in order to identify and document the existing condition of the various systems making up the buildings, to put this information in the context of the current needs and to present the capital cost implications of undertaking any corrective measures which may be necessary to maintain the integrity of the building envelope and systems.

The facilities which are the focus of this study and report are collectively the forty three school buildings and the supporting transportation network comprising the Eastern School District.

The Report does not deal with issues of curriculum, the French Immersion (District) Program, provision of grades offered at each school, future building planning or programming or other related issues. The complexity of introducing such topics to a report of this nature would prove too complex. Such topics are better left to separate study and can readily be undertaken in such a manner without compromising the integrity of this review

This document should be viewed as the beginning of an ongoing planning process, not the final resolution. In a world of constant change it is vitally important to have a vehicle to monitor the ever changing composition of the school system, to establish real data sets with which to plan a future and to establish measurable criteria against which to judge progress which offers to our children the greatest possible opportunity within our financial resources. This offers the rationale for such a beginning as well as a broad structure for ongoing review and development.

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TERMS OF REFERENCE

It has become increasingly clear to the Eastern School District that it is facing a broad range of challenges relating to improving the effectiveness, efficiency and economics involved in operating its 43 schools.

With regard to the current financial situation of the Eastern School District, Jim MacAulay in association with Coles Associates Ltd. were commissioned by the Eastern School District to undertake a Facility Review and Report preparation under the direction and control of the Eastern School District.

The Review was to identify the strengths and shortcomings of the present facilities in terms of physical features as well as the capacity of the facilities to deliver authorized programs and services. The study was also to identify alternate school arrangements with a view to establishing the most effective, efficient and economical delivery of educational programs and services.

The Review and Report has been conducted in accordance with the Terms of Reference prepared and issued by the Eastern School District and dated 1 May 1995

In summary, the terms of reference identified the requirement:

- To study and report to the Finance and Operations Committee on the following matters:
 - To collect information on existing school facilities including:
 - Present, optimum and capacity enrolment,
 - Projected enrolment for 5 years,
 - Building size, age, recent renovation or capital projects,
 - Projected renovations or capital requirements,
- Operating and maintenance costs.
 - Building code standards, including handicapped access,
 - Adequacy for program delivery,
 - Safety.
- To identify community development and demographic patterns in the areas currently served by the schools.
 - To identify alternate school facility arrangements keeping in mind the requirement for the effective, efficient and economical delivery for educational programs and services.

IMPLEMENTATION OF RECOMMENDATIONS

No specific strategy has been developed to implement the conclusions drawn from this report. This is left to the jurisdiction and action of the Eastern School District Board of Trustees

The development of any specific programme for facilities recommended in this report is also outside the scope of this Review

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EASTERN SCHOOL DISTRICT FACILITY REVIEW BRIEF

FACILITY REVIEW PRINCIPLES

During the development stages of the Review and in order to maintain focus on the task at hand, the authors identified six specific guiding principles:

1. To attain fair and equitable student access to programs, facilities and resources throughout the District,
2. To attain efficient and economical use of the transportation service,
3. To attain efficient and economical use of school buildings,
4. To establish clear and definitive school boundaries,
5. To maintain the integrity of the "family of schools" concept and
6. To establish a tool to provide an effective means to gain control of student demographic data for planning purposes.

DISCUSSION

HOW THINGS CAME TO BE

In a study of this nature, a historical review provides useful perspective. Until the late 1950's and early 1960's education in Prince Edward Island was primarily provided by small, one-room, community schools. Frequently a farmer provided in a corner of one of his fields, sufficient space for the school building and its playground. Each of these structures and its administration was an entity unto itself. In many of our communities, this model served very well for the social, economic, technological and demographical climate of the day. Many very prominent citizens emerged from these institutions.

By the late 1950's and early 1960's, however, citizens recognized that this model had served its time and the complexity of the educational process required a different organization. Regional high schools, consolidated elementary and junior high schools began to take shape on our landscape. Over time previously separate school boards were consolidated into larger units. This usually resulted in enlarged school boards from the old three trustee models that prevailed during the one room school era.

In 1972, another structure was put in place by the government of the day which introduced the unit model that existed until 1994. At this time our school boards were reduced to five and a more centralized approach was taken to our curriculum.

During the 1970's and 1980's new curriculum was advanced and schools gradually took new focuses. Buildings which had been put in place for various reasons and with no comprehensive planning for the future began to find that enrollments were dwindling. Indeed, in many cases, enrollments have decreased to one-half or less of the enrollment that existed when some of the schools were built.

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At this same time our schools began to offer an expanded curriculum. An expectation was established that schools could provide whatever program was required by the individual student. We have all come to expect that students stay in school longer to prepare for a rapidly changing world.

SCHOOL SIZE

The research findings on optimal school size are at best ambiguous. While much of the literature suggests that a school size of approximately four hundred for elementary and seven hundred for secondary schools is optimal, there is by no means any consensus on this topic.

The literature suggests that when looking at new schools or restructuring existing schools, policy makers should first define the basic program desired by a particular educational community along with the cost society is prepared to pay and the taxpayer can afford. Any option considered must address how the size of the school promotes the best possible learning opportunities for students.

It is the area of this relationship between school size and student achievement where no definitive data can be found to support informed recommendations on optimum school size.

Our school system must address the need to provide the resources necessary to develop essential skills required to respond to a rapidly changing world. In order that a school be in a position to offer a cost effective, basic program, a minimum enrollment at each school is required. As an example, many of our students require services such as guidance, resource help, and library. Schools that are forced to have more than one grade in a classroom are not in a good position to offer a full range of minimum services. Over the years all school boards have been very conscious of the needs and have made a valiant effort to provide services on an equitable basis. In many cases this has resulted in many services being

offered on a percentage basis in numerous schools. While most administrators and teachers will agree that this is better than none at all, the vast majority agree that it is much less than ideal.

If one investigates school size over the past fifty years, many school sizes put forth as ideal. At one time people felt that very large schools were the answers. Before long problems which surfaced led to a change of thinking and understanding that schools could be too large to manage. In our province the "too large" has not posed a problem as we are simply too rural to have schools that hold thousands. We do, however, have to consider the point at which our schools become too small in enrollment to offer what we consider today as minimum programs and services.

People have always had a difficult time breaking with tradition. However, we must make the best use of our resources to balance our budget and provide the best possible opportunities for our students. When situations such as this have come about in the past it invariably took a short amount of time before both parents and students made the adjustments and became satisfied with the results. One has only to refer to the recently published "Economic Development Strategy for Eastern Prince Edward Island" to recognize how important basic education is to the region. The Eastern School District Board wants the best possible education for each and every student within its jurisdiction. It is with this basic goal in mind that the authors of the Report put forth the following comments and recommendations.

Under our present system, it would appear that an enrollment of approximately two hundred students would provide the staff that we consider sufficient to offer the basic program that we have come to expect in today's society. Two hundred students would qualify a school for about eleven staff positions. Eight of these positions would be used in the traditional manner to offer instruction in the basic subject areas. The remaining three positions

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would be utilized by the school to provide the specialist services mentioned previously. All schools might not wish to offer exactly the same time in each area of curriculum. A particular school might, at any given time, have a need for greater time in resource work. With personnel readily available in the school, this could be accomplished. As the needs of an individual school shifted, the available staff could be used to fill the new needs. The determination of these needs would be the responsibility of the principal and staff of the school.

Under our present system, we expect specialist staff to serve up to four different schools. While the people who are performing these roles are dedicated and very conscientious they are physically unable to be everywhere at the same time. Most of these people do not feel that they are part of any particular school and indeed the school staff often has the same opinion. This leads to our students receiving less attention from our specialists. The erratic schedule these specialists must follow makes it virtually impossible for them to become involved in extracurricular activities. As such a great social benefit is lost.

In some cases this situation also leads to teachers providing instruction in a basic curriculum also serving more than one school. This situation has the same effect with these people that it has with our specialist teachers. Certainly a situation that would provide for as many staff as possible serving only one school would be very desirable.

TRANSPORTATION

When consolidation took place at both the senior high and elementary levels, it was accomplished by combining schools that served the various districts of Prince Edward Island. The original schools had been built in locations to allow a suitable walking distance for pupils to attend each individual school. Consolidation now required a bus service to transport students greater distances to school. Rather than redefining school zones based on a bus mode of transportation, consolidation merely

utilized a network of existing schools located for foot transportation. The transportation system resulted in many busses going to dead ends and then backtracking over highway already covered. During the time when fuel, drivers, and maintenance were relatively cheap, this was not of concern. Today, however, these costs are no longer cheap and our dwindling education dollar is not able to meet these costs any longer.

The time has come when we have to look at the catchment areas that are served by each of our schools with an intent to providing the most efficient and economical transportation system possible. During the review of the Eastern School District, numerous areas were identified where new strategies may be implemented which will vastly improve our transportation system. In these cases some families will find themselves in zones which will result in their children attending new schools.

FAMILY SYSTEM OF SCHOOLS

The Eastern School District has six families of schools designated by the regional high school that serves the area. The Report has made every effort to maintain the integrity of the family of schools concept, to ensure that students attend elementary, intermediate and high school within the same school family. This allows for six distinct bussing and planning areas in our district. The authors feel that this structure will make it easier for principles within each respective family to engage in co-operative planning in areas of common interest including bus routes and school events. Moreover it will provide for and support the co-ordination of programs that best meet the changing needs of the students. This approach promotes communication and interaction between sending and receiving schools.

Intermediate and Senior High Schools will be accommodated by assigning the graduate from our elementary schools to these institutions. There is one exception in the "family of schools" concept in this regard. Due to the quantity of students it is not

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possible to completely retain this integrity in regard to the intermediate and high schools in the Charlottetown area. Birchwood, Queen Charlotte, Stonepark, Charlottetown Rural and Colonel Gray are recommended for major re-zoning due to the re-zoning of the schools from where they receive their students.

Through the development and analysis of the review process, it became obvious that the senior and intermediate schools were located in reasonable proximity to the student populations and that their respective capacities responded reasonably well to the current student population.

An attempt to remove either a senior or intermediate school from the system would cause over utilization of the balance of schools at these levels. For reference the families of schools are noted below.

BLUEFIELD FAMILY

- Bluefield High
- East Wiltshire Intermediate
- Central Queens Elementary
- Eliot River Elementary
- Englewood
- Gulf Shore
- Westwood Primary

CHARLOTTETOWN RURAL FAMILY

- Charlottetown Rural High School
- Stone Park Intermediate
- Fort Augustus
- Glen Stewart Elementary
- Grand Tracadie Elementary
- L.M. Montgomery Elementary
- Sherwood Elementary

COLONEL GRAY FAMILY

- Colonel Gray Senior High School
- Birchwood Intermediate
- Queen Charlotte Junior High
- Parkdale Elementary
- Prince Street Elementary
- St. Jean Elementary
- Spring Park Elementary
- West Kent Elementary
- West Royalty Elementary

MONTAGUE FAMILY

- Montague Regional High School
- Montague Intermediate
- Belfast Consolidated
- Cardigan Consolidated
- Georgetown Elementary
- Montague Consolidated
- Southern Kings Consolidated
- Vernon River Consolidated

MORELL FAMILY

- Morell Regional High
- Morell Consolidated
- Mt. Stewart Consolidated
- St. Peters Consolidated
- St. Teresa's Consolidated
- Tracadie Cross Consolidated

SOURIS FAMILY

- Souris Regional High
- Dundas Consolidated
- Eastern Kings Consolidated
- Fortune Consolidated
- Rollo Bay Consolidated
- Souris Consolidated

STUDENT POPULATIONS

The mobility of student populations is difficult to predict and control. The ease of mobility of students relative to a fixed building has and will continue to cause vigilant monitoring by the Eastern District. For optimum usage, it is ideal to have schools available in close proximity to the major populations. This is more readily achievable in urban settings than in

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rural settings. It would be ideal to have a utilization rate in the vicinity of 85% to 90% for each school. This would minimize the per student cost to the District while still allowing for the necessary flexibility.

ZONING

Over the past number of years, various zoning have been in place in the schools within the present City of Charlottetown. Changing population patterns have necessitated changes in attendance zones. The advent of French Immersion (the District Program) has also influenced where pupils attend school at the elementary and intermediate school levels. Attendance zones were established some time ago and over time, various adjustments have taken place. At present, students living in a particular zone may choose to attend two or more different schools. As construction dollars became less available, schools were not built on the outskirts of the City to accommodate communities such as Brackley, Hillsborough Park or Winsloe. Students from these communities are bussed to City schools wherever room was available.

At present, students are able to and do attend each of the city schools. This situation makes it impossible for planning and makes the bussing system cumbersome, redundant and expensive. As we look to the future, more important, valuable dollars are being spent, not on bettering the educational resources and opportunities of our students, but simply on getting them to school.

The recommended reorganization of the school zones within the City areas is designed to correct this situation. The attendance zoning is identified and fixed for each school. The new transportation policy clearly identifies parameters for student transportation to and from school. The proposed zoning within the City optimizes the bus system, reduces cost and strives to establish standards thereby ensuring that zoning and related bussing do not get out of hand.

Accountability in our society is an increasing concern as it relates to the use of public resources. Accountability in the Education System includes dollars spent and resources purchased. The proposed rezoning arrangements for the City schools addresses both these issues. While it is relatively easy in rural areas to identify busses and schools that are no longer required, it is much more difficult to pinpoint busses in the city area. The new zoning will require new bussing arrangements. The new transportation policy will require fewer busses to transport the students. The new zoning is designed to make bussing as efficient as possible.

We are now able to locate all our students with the Geoscope computer software. We are also able to account for those children who will start school over the next five years. This new re-zoning model will be monitored each year so that, should major shifts take place in our student population, we will be able to plan at least three years prior to the children entering our school system.

STANDARD OF EXPECTATION

During the building review process and interviews, the writers gleaned some sense about the level of expectation for the school buildings. Consistent with the writer's evaluation of quality was the notion that overall the buildings are in good condition. However, schools including Grand Tracadie, Fort Augustus and West Royalty fell far short of a reasonable standard of quality and amenities.

Also sensed was an understanding that the task before the District was one of optimizing resources and minimizing waste in order that the greatest schooling opportunity may be provided to the students.

The level of expectation can be categorized as realistic and reflective of the current budgetary constraints recognized within the school district. Basic to the comments expressed by most principals was a need for proper school cleaning, ventilation for interior spaces and a quality of window sufficient

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to keep the elements out. There was also a recognition in most instances that a number of schools were designed as open concept schools and over the years partition walls have been constructed to enclose formal classrooms. In the process of enclosure ventilation systems were disrupted by not providing adequate air to internal spaces and in some instances internal spaces were created with no access to windows.

FUTURE PLANNING

A detailed investigation into programming and planning issues is outside the scope of this review. However, an important bi-product of this Facility Review is its implication for future planning of any future building construction or renovation. A number of clear directions are evident from the financial and physical information collected. While these may seem self-evident, it is important to outline these for future reference.

The average area per student for existing schools provide reasonable guidance for future schools.

The material selection of interior finishes plays an important role in the ultimate quality of the interior environment and cleaning and maintenance costs. Hard surfaces are more appropriate as a rule.

Control systems for mechanical system provide greater potential to monitor and control operational costs.

Building envelope material selection and detailing is critical both in providing initial weather protection and ultimately in minimizing the long term operational and maintenance costs.

SCHOOL BUILDINGS

The operation of the Eastern School District requires the complex management of physical facilities (school buildings), student demographics, curriculum, professional and support staff and transportation systems. The delivery of the total

program must be provided within a fixed annual budget.

Within these various components are a mixture of dynamic and relatively static elements. Static elements are typically the fixed buildings. The dynamic elements are student demographics, curriculum, staff and transportation elements. It is important to understand and put into the context of the dynamic elements, comments relating to the static fixed buildings.

It is the purpose of the fixed buildings to provide appropriate space, services and amenities to serve the school program both in its current state and as the various components evolve.

The design life of a building is considered to be approximately twenty-five to thirty years. With proper maintenance and timely refurbishing, renovation and/or addition to an existing facility, many buildings are able to extend their total life to much greater than this time frame. While the buildings remain relatively static over a period of two to three decades, many changes may occur in the overall structure of the school delivery system. Significant to this review is the history and evolution of the school building program in Prince Edward Island as outlined in the introduction to the Report.

As noted previously transportation played a major role in the evolution of the design and construction of school buildings. During the 1940's the one-room school was ubiquitous in response to the then current mode of transportation. Schools were located so that students could generally walk from their homes.

Through the years of 1970 to 1985 the school systems underwent consolidation. Larger buildings replaced numerous smaller buildings. Consolidation buildings were now responding to wider catchment areas in part made possible by advanced modes of transportation. New schools were constructed in locations not through a rationalization of economic

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transportation routes and demographic projection, but rather their locations were based on the original school districts. Foot transportation in a large measure determined our current school locations and inefficiencies.

In addition to the issue of school location and transportation, construction technology also underwent major developmental changes over the past decades. During the pre-development years of 1970 to 1985, rural schools were primarily constructed of wood frame. Larger urban schools were constructed of steel frame and unit masonry used either singly or in combination. The significant characteristic of these early buildings is their ability to eliminate air infiltration was far from current day standards and their obvious lack of mechanical and electrical systems relative to the most recently constructed schools.

The development program saw two styles of schools construction. The earlier schools constructed were similar in technology to the early unit masonry buildings. About half way through the development program, technology changed with the addition of a parging over the exterior of the concrete block course. Although not up to the air barrier technology of today, this was a significant improvement to the air infiltration volumes. At the same time, ventilation systems were now beginning to be introduced into schools.

Coincident with this change in construction technology was the impact the energy crisis was having on the design of buildings in general. Prior to the energy crisis the rates of ventilation were high. During the years of the energy crisis ventilation rates as identified by ASHRAE were dramatically reduced. This reduction in design ventilation rates coupled with the "natural ventilation" reduction caused by better seals to air infiltration through the application of parging caused significant reductions to the total ventilation rates available to buildings.

As the energy crisis came to an end, improved technology in ventilation equipment, improved synthetic air barriers, improved detailing for air seals and increased design ventilation rates allowed for overall improvements in total ventilation with unprecedented control potential over mechanical systems.

The negative impact of the development of building envelopes and ventilation systems is that education for system operators has not kept pace with their installation. Operation and maintenance cost escalated dramatically and poorly maintained systems became one of a number of sources of problems related to indoor air quality.

QUALITY ASSESSMENTS

Quality assessments and comments relating to the quality of building conditions in the Report are subjective and are based upon considerable practical experience of the writer in both preparing reports of this nature and building construction and renovation. Further comments are dependent on a number of criteria prioritized in three levels.

The first level of assessment is contingent upon the need for some particular component or system to maintain its integrity as a strategic component of the weather envelope, health or life safety systems or upon effecting the necessary repair or replacement of an element to prevent further ongoing structural, architectural, mechanical or electrical deterioration of this and other components or systems within the complex. Items in these category are considered immediate in nature and should be undertaken within one year. Items identified as such are noted as Priority One.

The second level of assessment relies on subjective evaluation of elements with respect to their need for maintenance, repair, refinishing, or replacement, in order for the elements in question to maintain an appropriate level of service as determined by the writer. This level also considers items which of

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necessity will require some practical period of planning before implementation. The time period for this level is one to three years. Items identified as such are noted as Priority Two.

The third level indicates longer term, low priority items. These items should be completed within a three to six year period. Items identified as such are noted as Priority Three.

SCHOOL MAINTENANCE

Basic to the understanding and successful operation of some two million square feet of building area, is that maintenance of building materials and systems is crucial.

Despite their seemingly static condition, building materials and building systems deteriorate. Wood rots, concrete cracks, steel rusts and machinery eventually grinds to a halt. It is necessary to repair, renovate and, finally, replace. Ideally, once a building has been constructed there must be provision for adequate maintenance funds and training to ensure the buildings remain safe and efficient structures. Typically funding for maintenance is far less than adequate. The result is that physical plants and equipment are not being properly maintained or replaced. If this state of affairs is permitted to continue, the deterioration will ultimately become reversible only at an unacceptable cost.

On a relatively large stock of building such as in the Eastern School District schools, there is a cross section of building ages and construction types which should imply a relatively stable average cost for building maintenance. This is not reflective of an amount which has been spent in past years but what should have been spent to address repair needs. The major system repairs, where they are present, include re-roofing, re-pointing of brick, replacement of siding, flashings, windows, exterior doors, ventilation system, motors, lighting, and interior doors and hardware, flooring, pavement. The frequency of replacement and/or repair to any

given component is variable and dependent on a number of criteria, including usage, maintenance, exposure, service conditions and quality of original component. It is virtually impossible to plan within a precise timetable which components must be repaired or replaced. Further, with such items as roofing, very often the roof may be repaired numerous times before it is replaced in its entirety. Traditionally, the components are allowed to deteriorate to the point where secondary items, (adjacent items), begin to become affected. To a large degree proper maintenance is impacted by the financial resources available.

In general terms, the major components noted above can be expected to be replaced once in a fifteen to twenty year cycle. It is desirable to allow financial planning and money set aside, annually, to have these components replaced as required. In an ideal world, the budget process should allow for this inevitability.

A number of principles can be stated with respect to the maintenance of buildings.

1. Program of regular maintenance must be established to quickly reinstate damaged or worn items on a regular basis. Psychologically, a well maintained building is better respected by its users and is not so frequently damaged as is a building not maintained.
2. It is essential to have competent, knowledgeable and well trained staff responsible for maintaining the building and systems. School buildings, and particularly the more recently constructed buildings, are ever-increasing in mechanical, electrical and material sophistication. In the majority of schools the mechanical and electrical systems are micro-computer controlled. Without competent maintenance staff available who thoroughly understand the systems, these systems are both a capital and a maintenance liability.

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3. Maintenance of a building extends to thorough and regular cleaning. Greater understanding of indoor air quality issues in buildings indicate that healthy air requires that a balance of several factors be maintained. Microbes requires a source of food, moisture and warmth in order to live and propagate. It is unreasonable to believe that where open windows and ventilation intakes provide a source of fresh air into schools, that naturally occurring microbes will not be introduced with the fresh air. The significant difference between a school with air quality problems and one without is the concentration levels of microbes. To reduce the risk of poor air quality every effort must be made to eliminate the source of food and moisture. Little can be done about the need for warmth.

Food available to microbes is in the form of dirt, dust and organic building materials. Relative to the discussion of floor materials in the Report, carpet provides a more difficult material to clean than does hard surface. A thorough and regular cleaning of all surfaces where dust and dirt may collect is essential to reduce the potential for microbial growth. This extends to mechanical systems and filters.

Sources of moisture come from leaks into the building through the weather envelope and leaks within the building from poorly maintained mechanical systems such as humidification and plumbing systems. Every effort must be made to inspect the perimeter surfaces of the school buildings on a regular basis for damage to the weather envelope and to have any damage repaired immediately. Proper inspection must also be undertaken for the mechanical systems where water is involved to ensure that leaks are detected and repaired and that standing water is eliminated. Materials which have been wetted must be inspected, repaired, cleaned and if necessary replaced.

4. Regular maintenance leads to reduced cost of operation of mechanical systems. Well maintained systems are more efficient and break down less frequently. Preventative maintenance is key to obtaining lower operation and maintenance costs.

5. Possibly the most difficult to deal with is the question of maintenance funding, particularly at a time when financial support is eroding. Through research in other studies, we have concluded that an allowance in the order of magnitude of \$2.00 per Ft² per year for ongoing maintenance is appropriate for a rule of thumb.

As compared to the replacement value for a comparable school type, this translates to 2.2% of the estimated replacement value of the building.

It should also be noted that as the newer, more sophisticated buildings begin to age their maintenance and repair costs will out-strip those older less sophisticated buildings, that is those buildings in which mechanical and electrical systems were never installed. Through preventative maintenance this is possible to avoid and every effort must be made to do so.

Building maintenance is not simply a matter of providing more money. In order to be successful a number of strategic initiatives must all come together. These include adequate funding, proper training for maintenance personnel, a planned approach to problem identification (survey), a planned approach to problem rectification and commitment to an ongoing preventative maintenance program.

It is unreasonable to assume that all buildings require the same level of maintenance at any given point in time particularly if some level of deterioration has been allowed to occur. Stated another way, it is unreasonable to expect a budget allocation for an average building in good

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condition to be suitable for an average building which has not been maintained regularly for a number of years or at all.

Another consideration is that not all buildings are equal in terms of their construction detailing, use of materials, or the presence through the range of the various mechanical or electrical systems. The range of systems available to buildings today is varied and the cost and attention necessary to maintain the variety of components is as varied as the components themselves.

A program should be developed to put in place a training program for motivated maintenance staff and the financial resources to repair and replace the major building systems.

At present school maintenance is undertaken by both the Eastern School District and the P.E.I. Department of Transportation and Public Works. Generally, the responsibilities of the School District extend to day to day maintenance. The provincial program provides maintenance dollars to all schools on the Island on an annual basis on some priority basis. The work covered includes major maintenance and upgrading including such items as roof repair/replacement, window replacement, exterior envelope repair, ventilation/heating system upgrade, replacement of floor finishes. In addition, capital dollars for major renovations, additions and new construction are provincially funded.

It is important to understand the relationship between day to day maintenance/cleaning on long term capital maintenance. If neglected, the day to day maintenance will significantly increase the capital requirement for repairs and replacement thus placing an unnecessary burden on these scarce dollars. Major repairs will be required earlier, more frequently and will have broader implications than would be the case with a well maintained building.

The establishment of a maintenance review by an adequate, well trained staff on a frequent basis with an action plan for implementation and follow up is money well spent.

CURRENT MAINTENANCE PROGRAM

The current program for maintenance being undertaken by the Province as noted above is addressing to each of the schools in turn.

With respect to the upgrades for schools in this District, work completed or in progress is noted in the respective school summaries in Appendix A.

FLOORING MATERIALS

Over the last number of years, a re-evaluation of the flooring materials appropriate for use in schools and other commercial and institutional buildings has occurred.

Through the period of the 1970's and 1980's a general shift in thinking suggested installing soft surfaces such as carpet and to move away from the hard surfaces such as terrazzo and vinyl composite tile traditionally used on school floors. Recent experience with schools and commercial buildings indicated that for environmental reasons, a shift back to hard surfaces is appropriate. Hard surfaces retain less dust, provide less opportunity for fungal growth and are less expensive to maintain. The down side is that noise cushioning is less effective with hard surface than with carpet.

Over the last few years a growing number of schools have taken steps to have the carpet removed and replaced with hard surface.

As a comment affecting all schools in the District, planning should be undertaken to ensure that all carpet in teaching and related spaces be removed and replaced with hard surface flooring. It is appropriate to leave up to both the District and the individual school, their preference in deciding how softer spaces such as teacher lounges should be dealt with in terms of floor covering.

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BUILDING CODES

The National Building Code (NBC) is a document prepared by the National Research Council of Canada, which historically has been updated every 5 years. The NBC further references associated documents such as the Canadian Electrical Code (CEC), the National Fire Protection Act (NFPA) and the American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE). It is the purpose of the NBC and related documents to establish standards for building construction and systems, the focus of which is occupant safety. It is the underlying intent of the NBC and related documents to provide a level of systems and environment within a building which provide for adequate life safety, environmental conditions (i.e. light levels and air ventilation levels) and mobility (i.e. barrier free access). While all regulations and standards do not necessarily get more stringent, regulations and standards very often change. It is a fact that buildings never "catch up" to the state of the current day codes.

Prince Edward Island as a whole has not adopted the NBC. The City of Charlottetown has adopted the NBC as one of its components of standards for building construction and life safety. Within the City of Charlottetown by-laws also govern the design and construction of buildings.

Although throughout the Eastern School District the NBC has not been adopted in all areas, it is appropriate to use the NBC as a guide toward a reasonable standard of life safety, mobility and environmental conditions.

In jurisdictions where the document has been adopted there is no mechanism in place which requires a building owner to maintain a building current with the NBC. However when a major upgrade is contemplated it is expected that the renovations to comply with the Code.

When it becomes necessary or desirable, upgrading older buildings where they were not originally

designed to incorporate fire ratings or bulky and space consuming systems can be difficult to achieve the letter of the Regulation. More often it is the intent to reasonably provide a reasonable life safety which is more readily achievable.

SPRINKLERS

At present, the City of Charlottetown is the only Authority Having Jurisdiction within the Eastern School District which through the National Building Code of Canada and its own Municipal By-Laws requires sprinklers to be provided in school buildings. A number of years ago the Prince Edward Island Department of Transportation & Public Works as the design authority for construction of Island schools had established a precedent in which schools located outside the City of Charlottetown would not be provided with sprinkler systems. As noted in the Report, the National Building Code of Canada is used as a guide and reference establishing a level of safety within buildings. Where the National Building Code of Canada is not adopted in the Province as a whole, the design authority is not obliged to comply with this document.

With exceptions, the buildings in the City of Charlottetown are sprinklered and all buildings outside the City of Charlottetown are not sprinklered. It is the premise of the Report that the lack of a sprinkler system is not in itself a deficiency which must be addressed.

AREA PER STUDENT

The building area per student for high schools is relatively consistent over a narrow band ranging from about 110 students to 150 students per square foot. The exceptions are both Morell Regional High and Souris Regional High. Souris Regional High is currently at a utilization rate of 86%. As this number moves toward 100%, its square feet per student would draw closer to the average. Morell Regional High at approximately 200 sq. ft. per student was designed to higher area standards than the balance of the buildings in this group. The average

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of 150 square feet per student is reasonable. Currently it is at its optimum student enrolment

The intermediate schools range from approximately 105 sq. ft per student to 185 sq. ft per student. Birchwood at 183 sq. ft per student currently has a utilization rate of 105%. Rollo Bay is grossly under-utilized at 39%. The average of 150-square feet per student is reasonable

The elementary schools range from 67 sq. ft per student to 257 sq. ft. per student with the average being about 130 sq. ft per student. Fortune Consolidated, Morell Consolidated, Mt. Stewart Consolidated, St. Peters Consolidated and Tracadie Cross Consolidated are all schools which are seriously under-utilized. On the other end of the spectrum, Cardigan Consolidated, Glen Stewart Elementary, Parkdale Elementary are schools which have a current utilization rate in excess of 100%. A re-distribution of the population would better utilize school facilities.

The utilization rate better reflects where economies can be made than does the square feet of building area per student as this is an indication, in part, of the basic design of the building. Allowing that no additional classroom can be easily recovered, the optimum student population cannot be changed. The utilization rate is a descriptor of the current population relative to its optimum population. The low utilization rate is simply saying that the resources are under-utilized. The fixed cost for 100% utilization rate is the same for a 50% utilization rate. Stated another way, the District is paying for resources which it is not using.

HOURLY COST

For information purposes the average cost to operate a school on a square foot basis is \$0.18 per square foot per hour, plus the hourly custodial charges. This is derived by dividing the total annual operational and maintenance cost by the total building area. This, in turn, is divided by an assumed 12 hour day. It must be recognized that not all

schools operate at the same cost and not all hours of the day or through the year represent the same cost.

OPERATING COSTS

The Eastern School District is currently responsible for 2,056,585 square feet of building area. In the fiscal year 1995-96, \$1,338,466 was spent on electrical costs, \$750,404 was spent on fuel costs and \$2,617,311 was spent on all operational and maintenance costs. Across the District, the cost to operate schools is \$0.10/Ft²/year on average.

In assessing the operational and maintenance costs, a number of matters became apparent. Most important are that there are savings available. The savings can be achieved at no cost the Eastern School District in the short term, the changes necessary will result in ongoing and long term savings and the savings have no negative impact on providing a suitable educational environment.

General

The purpose of showing the identified costs as a function of cost per 10 students is to obtain a relative cost (school to school) on a per student basis. Stated another way, what needs to be identified is which schools are less expensive to operate per student. This approach quickly demonstrates the importance of maintaining school usage at an optimum level.

The purpose of showing the cost per 1,000 square feet is to provide an absolute comparison between schools independent of student population. In this approach the costs are fixed whether the school is full or half-full. This provides a guide to the efficiency of the school for the cost category (electricity, fuel or building and maintenance).

To some degree costs will be reflective of building use, that is those buildings used heavily for night activities will naturally cost more to operate.

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Electrical Costs

An average electrical cost for high schools is about \$550/1,000 square feet with Montague, Colonel Gray and Bluefield being the most expensive to operate electrically. Montague electrical costs can expect to increase as its new ventilation system come on stream. Morell and Montague High schools did not have ventilation systems installed until recently. Charlottetown Rural and Colonel Gray were upgraded in 1991-92.

A close look at Charlottetown Rural electrical costs reveals that in 1991-92, \$44,269 was spent and the next three years averaged \$66,742. Although some of the cost increase is attributable to area increase, the most of the 50% cost increase is due to the installation and operation of its new ventilation system. As the Province moves to upgrade the ventilation systems in schools, the electrical and fuel costs will rise.

On a square foot cost, each high school should target to achieve a cost of \$400/1,000 square feet.

Intermediate schools operate in a narrower range averaging \$600.00/1000 sq. ft. Birchwood is able to achieve \$483/1,000 square feet. Each of the schools has a ventilation system although the Stone Park is aging. The significance of the ventilation system to electrical consumption is that ventilation systems are high energy consumers. A target of \$500.00/1000 sq. ft. for the intermediate level is realistic.

Each of the intermediate schools except Montague have ventilation systems installed.

The average electrical cost for elementary schools is approximately \$425/1,000 square feet. The range of mechanical systems and building construction and condition is wide at the

elementary level. This is producing a predictably wide range of cost/1,000 square feet.

Within the elementary group of schools, there are electrical costs of about \$300 per thousand square feet for such schools as Dundas, Fortune, Georgetown, Grand Tracadie, Lucy Maude, Montague, Morell, Souris Consolidated, Spring Park, West Kent. In the above list of schools are a variety of ventilation systems ranging from none to basic. The extremes in electrical costs are West Royalty and Glen Stewart which operate large areas of electrically heated mobile classrooms. Eastern Kings Consolidated is extraordinarily high. It should be the objective to return all elementary schools to a cost of not more than approximately \$400 per thousand square feet. West Royalty and Glen Stewart electrical costs are predictably high given their reliance on electricity to heat the high proportion of poorly insulated and sealed mobile units and relocatable units respectively.

Schools including Eastern Kings, Eliot River, Glen Stewart, Gulf Shore, Mt. Stewart, Southern Kings, St. Teresa's, Vernon River and Westwood have ventilation systems installed.

Fuel Costs

As for Electrical costs, the cost per student provides a graphical representation of the relative per student cost between schools.

The average fuel cost for high schools is approximately \$75/1,000 square feet. The average fuel cost for intermediate schools is approximately \$350/1,000 square feet. The average fuel costs for elementary schools is approximately \$390/1,000 square feet.

Colonel Gray and Queen Charlotte are the only two schools on the Charlottetown District Heating system. Although this will not affect the heating costs, it will lower operational costs over

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time due to the lack of required boiler maintenance costs at each of these schools

Generally, the building envelopes are more efficient in the senior and intermediate schools.

Notably Central Queens, Fort Augustus, Georgetown, Glen Stewart, Grand Tracadie Mt Stewart, Souther Kings, Vernon River, and Westwood are well above \$400/1 000 square feet.

Potential reasons for excessive heating costs are poor insulation levels, lack of air barriers and poor seals at windows and doors.

West Royalty has low fuel costs because it is heated primarily by electrically.

Building And Maintenance

The average building and maintenance costs for high schools is approximately \$225/1 000 Ft² and \$275/1,000 Ft² for intermediate schools.

Charlottetown Rural, Colonel Gray, Birchwood and Queen Charlotte are significantly less costly to maintain. This is expected since each of the four schools is recently renovated.

Considered another way, if not properly maintained in the early years each of these four schools with expensive and extensive systems has the potential to be very expensive to maintain in later years.

The average maintenance cost for elementary schools is approximately \$275/1,000 Ft². Although comparable to senior and intermediate schools, these costs should be less due to less sophisticated systems present in these buildings. This average cost is elevated because of a generally older stock of buildings and because of excessive building maintenance costs for Central Queens, Glen Stewart, Grand Tracadie.

ENERGY SERVICE COMPANIES

Energy Service Companies (ESCO) are companies which undertake detailed investigations into the electrical, mechanical and maintenance operational costs and provide a guaranteed financial return to building owners. Typically, upgrading and repairs will be made to approximately the annual expenditure on these three items. Various funding arrangements may be negotiated but whichever approach is taken, typical paybacks are five to six years. After that time, financial benefits would accrue directly to the District.

Items targeted by an ESCo are lighting, motors, electric heat, fuel source, ventilation schedules, heating schedules, boiler efficiencies, and maintenance operations, procedures and schedule

The Eastern School District has had some preliminary discussion with ESCo's but to date no implementation has occurred.

Overall the objective should be to reduce the absolute cost for operating and maintenance. Relative costs between schools should be used to establish costs targets for schools more expensive to operate

The level of savings expected should be in the order of 20% for electrical systems and 15% for fuel savings. This translates to approximately \$214,900 and \$112,500 annually respectively after the payback period has expired

COST ESTIMATES

For discussion and guidance purposes only and for the purposes of this review, it is appropriate to identify the cost of constructing new school space.

The cost of new construction for school buildings as determined by the Prince Edward Island Department of Transportation and Public Works on 30 May 1996 is provided as follows:

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High School Construction \$97.20 per Ft²
 Intermediate School Construction \$90.75 per Ft²
 Elementary School Construction \$84.25 per Ft²

RECOMMENDATIONS

Recommendations put forth in the Report are:

This estimate excludes the cost of land, furnishings, equipment and site works. No allowance is made for escalation.

The range of possible renovations and repairs to buildings and the time frame over which these repairs may be undertaken are so varied as to make any attempt at estimating repair or renovation costs to be of limited practical purposes. For this reason repair or renovation costs are presented for general discussion purposes.

Following is a list of major systems together with representative costs in current dollars.

Ceilings	\$2.60/ft ²
Elevator	\$25,000 to \$40,000
Exterior Walls	\$5.00/ft ²
Exterior aluminum doors and hardware	\$2,300/ft ²
Exterior doors and hardware	\$750/ft ²
Gymnasium floor	\$10.00/ft ²
Interior doors and hardware	\$600/ft ²
Ventilation	\$5.00 to \$10.00/ft ²
Roofing	\$5.50/ft ²
Vinyl flooring	\$2.20/ft ²
Windows	\$31.00/ft ²

The development of detailed programming will be required for new construction, additions and renovations in order to establish a more detailed and realistic estimate of construction cost.

1. That existing school buildings including Eastern Kings, Dundas, Grand Tracadie, St. Teresa's and West Royalty close, that students who now attend these schools be rezoned to attend adjacent schools, and that the school buildings be returned to the care, custody and control of the Province.
2. That the present school board office in Montague close and the office be relocated in the proposed construction at Montague Intermediate School. Temporary relocation to Montague Consolidated School will occur until such time that a new Montague Intermediate School can be constructed.
3. That major re-zoning occur at Glen Stewart, Mt. Stewart, Prince Street, Fortune/Rollo Bay, St. Jean, St. Peter's, Souris Consolidated, Spring Park, Tracadie Cross, Vernon River and West Kent. This re-zoning will address overcrowding which is identified schools in this group and add students to those schools which are presently under utilized.
4. That major rezoning occur at Birchwood, Queen Charlotte, Stone Park, Charlottetown Rural, and Colonel Gray to reflect the re-zoning of the schools from which they receive students. Intermediate and Senior High Schools will be populated by assigning graduates from specific elementary schools.
5. That minor re-zoning occur at Belfast, Cardigan, Central Queens, Georgetown, Gulf Shore, L.M. Montgomery, Montague Consolidated, Morell Consolidated, Parkdale, Sherwood and Southern Kings. This re-zoning will address transportation inefficiencies and relocation of the students who will require accommodation.

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due to their present school being recommended for closure

6. That Englewood and Eliot River/Westwood retain the boundaries which they serve at present.
7. That planning for the construction of a new Montague Intermediate School be undertaken to alleviate very serious over-crowding, as well as to address reduced opportunity for students in a number of areas, which currently exists at this school.
8. That planning for the construction of a new gymnasium be undertaken for Parkdale Elementary School. With the construction of this gym, all our schools in the Eastern School District will be provided gymnasium. Rented space will not longer be required for this purpose.
9. That planning for a renovation and addition be undertaken for Bluefield High School, to provide the necessary space for computer technology and career exploration within the existing building, to create increased flexibility by modifying the existing science laboratories and to create needed space for meetings and classes with an addition.
10. That, where Fort Augustus Consolidated School is in a state of dis-repair and it is not suitable for renovation, planning should be undertaken for the construction of a new structure that will be located closer to Charlottetown in order to further alleviate the over crowding at Glen Stewart School and to address future population expansion anticipated in the area.
11. That maintenance responsibility and funding arrangement be clearly identified between Eastern School District and Provincial Government and that a capital program be established and adequately funded that will provide the necessary and ongoing capital maintenance program.
12. That ongoing monitoring system be implemented to cause regular reviews of the facilities with a view to further optimizing the system
13. That an Energy Service Company be engaged immediately to implement efficiencies available in the mechanical, electrical and building maintenance systems
14. That planning for future facilities be done so in the context of the Report and that due consideration be given to:
 - student demographics,
 - program needs,
 - space requirements relative to building type and in keeping with current average (elementary, intermediate or high school),
 - finishes,
 - mechanical and electrical system requirements and
 - materials of construction and detailingall with a view to understanding to total capital and operational costs during the planning stages in order that adequate financial resources may be established to properly operate and maintain the facility throughout its life.

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SUMMARY OF CAPITAL PROJECTS

The identified capital projects are summarized below. A ranking of all identified projects will be required in order to establish a capital program with an appropriate schedule for work and funding.

The number identified to the left of the recommendations below, refers to the priority for that school without regard to other facilities.

High Schools

- Bluefield High School
 - 1 Addition/renovation
 - 2 Minor site work
- Charlottetown Rural High School
 - None identified
- Colonel Gray Senior High School
 - None identified
- Montague Regional High School
 - 1 Window replacement
- Morell Regional High School
 - None identified
- Souris Regional High School
 - 1 Door leak repair
 - 2 Roof replacement

Intermediate Schools

- Birchwood Intermediate High School
 - 2 Boiler replacement
- East Wiltshire Intermediate High School
 - 1 Ventilation vibration repair
 - 1 Gym partition repair
- Montague Intermediate School
 - 1 Addition
 - 1 Heating Control
- Queen Charlotte Intermediate High School
 - 1 Roof repair and brick repointing
- Rollo Bay Consolidated School
 - None identified
- Stonepark Intermediate School
 - 1 Roof repair, ventilation upgrade, partition upgrade

Elementary Schools

- Belfast Consolidated School
 - 1 Handicapped lift
- Cardigan Consolidated School
 - 1 Heat control
 - 2 Roof repair
- Central Queens Elementary School
 - 1 Ventilation upgrade, window repair
- Dundas Consolidated School
 - Close
- Eastern Kings Consolidated School
 - Close
- Eliot River Elementary School
 - 1 Window and roof repair
- Englewood Elementary School
 - 1 Window and skylight repair, minor regrading, mobile repair
- Fort Augustus Elementary School
 - None identified
- Fortune Consolidated School
 - 1 Wall repair
- Georgetown Elementary School
 - 1 Window repair and washroom ventilation
 - 2 Roof repair
- Glen Stewart Elementary School
 - None identified
- Grand Tracadie Elementary School
 - Close
- Gulf Shore Consolidated School
 - None identified
- L. M. Montgomery Elementary School
 - 1 Minor roof leaks and window repair
- Montague Consolidated School
 - 1 Window repair
 - 2 Handicapped access
- Morell Consolidated School
 - 1 Repair handicapped lift
- Mt. Stewart Consolidated School
 - None identified
- Parkdale Elementary School
 - 1 Gymnasium addition, heat control, handicapped lift installed
- Prince Street Elementary School
 - 1 Roof and window replacement
 - 2 Repainting

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Souris Consolidated School
None identified

St. Jean Elementary School
1 Facelift

St. Peter's Elementary School
1 Brick repointing and window replacement

St. Teresa's Elementary School
Close

Sherwood Elementary School
2 Repair pavement

Southern Kings Consolidated School
2 Window repair

Spring Park Elementary School
2 Handicapped Ramp

Tracadie Cross Consolidated School
1 Heat Control

Vernon River Consolidated School
1 Ventilation and window repair

West Kent Elementary School
2 Gym roof, gym lighting, window repair

West Royalty Elementary School
Close

Westwood Elementary School
None identified

School Board Office
1 Relocate

SUMMARY OF COST SAVINGS

The identified cost savings are summarized below. Costs identified for school closures have been rounded and therefore vary slightly from those savings noted in the respective school summaries.

High Schools

Bluefield High School
Bussing \$280,000/yr

Charlottetown Rural High School
Rezoning \$150,000/yr(estimate)

Colonel Gray Senior High School
Shared savings with city schools

Montague Regional High School
Shared savings with Dundas

Morell Regional High School
Shared savings with Mt. Stewart

Souris Regional High School
Shared savings with Fortune

Intermediate Schools

Birchwood Intermediate High School
2 Boiler replacement

East Wiltshire Intermediate High School
Shared savings with Bluefield

Montague Intermediate School
None identified

Queen Charlotte Intermediate High School
Shared savings with city schools

Rollo Bay Consolidated School
Bussing \$35,000/yr

Stonepark Intermediate School
Shared savings with city schools

Elementary Schools

Belfast Consolidated School
Minor savings in bussing

Cardigan Consolidated School
Identified under Dundas

Central Queens Elementary School
Bussing \$70,000/yr

Dundas Consolidated School
Bussing \$35,000/yr
Closure \$42,200/yr

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EASTERN SCHOOL DISTRICT FACILITY REVIEW BRIEF

Eastern Kings Consolidated School

Bussing \$70,000/yr

Closure \$51,400/yr

Eliot River Elementary School

Shared savings with Bluefield

Englewood Elementary School

Bussing \$50,000/yr

Fort Augustus Elementary School

None identified

Fortune Consolidated School

None identified

Georgetown Elementary School

None identified

Glen Stewart Elementary School

None identified

Grand Tracadie Elementary School

Bussing \$35,000/yr

Closure \$24,900/yr

Gulf Shore Consolidated School

Bussing \$35,000/yr

L. M. Montgomery Elementary School

Shared savings with Tracadie

Montague Consolidated School

None identified

Morell Consolidated School

Shared savings with Morell Regional

Mt Stewart Consolidated School

Shared savings with St Teresa's

Parkdale Elementary School

Shared savings with city schools

Prince Street Elementary School

Shared savings with city schools

Souris Consolidated School

Shared savings Eastern Kings

St Jean Elementary School

Shared savings with city schools

St Peter's Elementary School

Shared savings with Dundas

St. Teresa's Elementary School

Bussing \$70,000/yr

Closure \$29,800/yr

Sherwood Elementary School

Shared savings with city schools

Southern Kings Consolidated School

No significant change

Spring Park Elementary School

Shared savings with city schools

Tracadie Cross Consolidated School

Bussing \$35,000/yr

Vernon River Consolidated School

No significant change

West Kent Elementary School

Shared savings with city schools

West Royalty Elementary School

Bussing \$35,000/yr

Closure \$42,100/yr

Westwood Elementary School

Shared savings with Bluefield

School Board Office

Closure \$15,000/yr(estimate)

The total annual estimate of cost savings for the items identified above is \$1,105,400/yr.

In addition there is potential savings of \$214,900 plus \$112,500 for electrical and mechanical systems following upgrade by an ESCo and payback. These values are expressed in current dollars.

The total savings potential in time is \$1,432,800.

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