

Western Quebec School Board

Investment Plan 2023-2024

Buildings and Technology

Resolution# C-22/23-236

Table of Contents

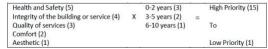
Table of Contents	2
Goal of the Investment Plan	3
Categorization of Investment Projects	4
Buildings Assets	5
Condition Index	6
Age of the Buildings	7
Type of Ventilation	8
Energy Management	8
0-5 Years Required Investment	9
Budget Source and Investment Projects	10
Accessibility	10
Availability for 2023-2024	10
Project Authorization	10
Investment Projects	10
Transformation	10
Availability for 2023-2024	10
Project Authorization	10
Investment Projects	11
Renovation	11
Availability for 2023-2024	11
Project Authorization	11
Investment Projects	12
Technology	13
Availability for 2023-2024	13
Investment Projects	14
Devices	14
Vocational Training	14
IT Infrastructure	
Contingency	
Furniture, Tools and Equipment (FTE)	
Availability for 2023-2024	
•	

Goal of the Investment Plan

The annual investment plan is mandatory to obtain the necessary authorizations from the Ministry of Education (MEQ) to proceed with the projects. This planning must be sent, for most of the measures, in September of each year.

The investment projects in this document have been selected and prioritized based on:

- A complete inventory and an analysis of the assets
- The respect of the legal obligation
 - o Contaminants (Lead, CO2, Asbestos, Radon, ...)
 - Energy consumption
 - o Security of the information
- An alignment with the MEQ priorities
 - o Reduction of the Condition index by choosing the project with highest score



- 15 Security Measures
- o Movement of the servers in the Cloud
- The school principal's requests
- The availability of the resources
- Organizational mission
- Reduction of maintenance cost
- Diversifying and respect the market capacity
- Schedule and Cost

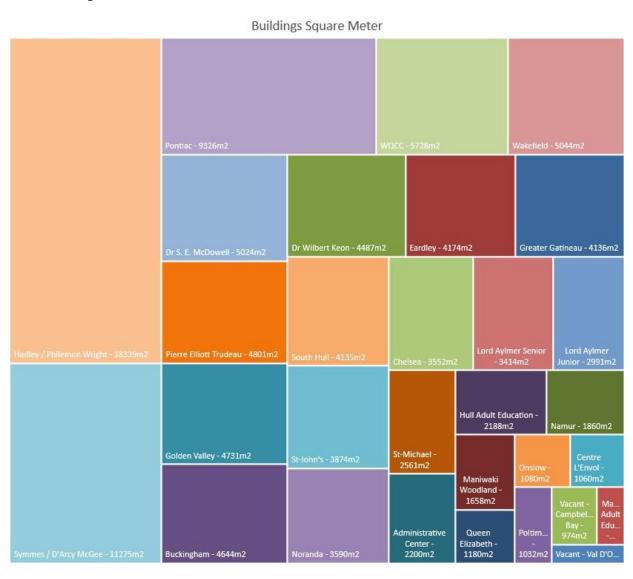
Categorization of Investment Projects

The priority of each project is identified by the following logo:

HEALTH & SAFETY	Health and Safety	Buildings: Investment to protect the safety of buildings and their occupants (Alarm system, Fob keys, CO Alarm, Control of the contaminants,) Technology: Investment to protect personal and confidential information
		(Security measures, System of control,)
	Legal Obligation	Investment required by law or regulation with no impact on health and safety, building integrity or quality of service (Installation of flags, Installation of privacy screens, New IT security components,)
INTEGRITY	Integrity of the infrastructure	Buildings: Investment to ensure that the building structure continues to support the intended load without failure due to fracture, deformation or fatigue. (Foundation, Building Structure, Protection against the elements such as roof work, Exterior finishing,)
		Technology: Investment to ensure the IT Infrastructure continues to support the telecommunication traffic load (Fiber optic, Network, Switches, Wi-Fi,)
QoS	Quality of Services	Investment to transform, maintain or replace assets to preserve quality of services and respond to changing needs (Transform space to change the functionalities, Replace IT equipment to increase the internet bandwidth, Build extension or new school, accessibility,)
**	Efficiencies	Investment to reduce the cost and/or the use of resources (Sustainable development, Energy management,)
	Groundwork	Investment to improve schoolyard, parking lots and sidewalks
	Business Continuity	Investment to reduce downtime in the event of disruption (Electrical failure, Internet Failure, Snowstorm,)
1	Aesthetic	Investment aimed primarily at making the asset beautiful (Painting, Replacement of a good asset by another one for aesthetic purposes, Replacement of IT devices to keep up with the latest trend,)

Buildings Assets

The Western Quebec School Board manages 30 buildings for a total of 120 134 square Metres. The smallest building is the former Val D'Or Adult Education Centre at 495m2 and the largest is Hadley / Philemon Wright at 18 339m2.



Condition Index

The condition index is the ratio expressed in percentage between the investment required within 5 years and the replacement value of the building. A building with a condition index of less than 15% is considered in good condition.

Condition Index								
Building	Investment 0-5 years	Replacement Value	Condition Index	IEG				
Wakefield	586 907 \$	26 269 152 \$	2,2%	Α				
Administrative Center	597 977 \$	11 457 600 \$	5,2%	В				
Poltimore	358 362 \$	5 374 656 \$	6,7%	В				
Symmes / D'Arcy McGee	3 984 438 \$	58 720 200 \$	6,8%	В				
Namur	887 089 \$	9 686 880 \$	9,2%	В				
WQCC	3 139 879 \$	29 831 424 \$	10,5%	С				
Maniwaki Adult Education	379 239 \$	3 025 848 \$	12,5%	С				
Lord Aylmer Senior	2 237 445 \$	17 780 112 \$	12,6%	С				
Golden Valley	3 933 399 \$	26 398 981 \$	14,9%	С				
Greater Gatineau	3 236 105 \$	21 540 288 \$	15,0%	D				
Maniwaki Woodland	1 346 630 \$	8 634 864 \$	15,6%	D				
South Hull	3 541 694 \$	21 535 080 \$	16,4%	D				
St-John's	3 508 192 \$	20 175 792 \$	17,4%	D				
Eardley	4 067 921 \$	21 738 192 \$	18,7%	D				
St-Michael	2 751 547 \$	13 337 688 \$	20,6%	D				
Centre L'Envol	1 220 281 \$	5 914 800 \$	20,6%	D				
Pontiac	11 262 960 \$	48 569 808 \$	23,2%	D				
Chelsea	4 600 043 \$	18 498 816 \$	24,9%	D				
Hull Adult Education	2 903 917 \$	11 395 104 \$	25,5%	D				
Queen Elizabeth	1 597 823 \$	6 145 440 \$	26,0%	D				
Noranda	5 347 683 \$	20 032 201 \$	26,7%	D				
Buckingham	6 532 426 \$	24 185 952 \$	27,0%	D				
Hadley / Philemon Wright	25 969 589 \$	95 509 512 \$	27,2%	D				
Pierre Elliott Trudeau	7 338 133 \$	25 003 608 \$	29,3%	D				
Dr Wilbert Keon	7 449 471 \$	23 368 296 \$	31,9%	Е				
Lord Aylmer Junior	5 200 366 \$	15 577 128 \$	33,4%	Е				
Dr S. E. McDowell	9 443 766 \$	26 164 992 \$	36,1%	Е				
Onslow	2 229 291 \$	5 624 640 \$	39,6%	Е				
Vacant - Campbell's Bay	2 302 100 \$	5 072 592 \$	45,4%	Е				
Vacant - Val D'Or	1 264 884 \$	2 762 100 \$	45,8%	Е				

Age of the Buildings

The oldest building is Noranda School built in 1937 and the newest is Wakefield, built in 2013. At Western Quebec, the average age of our buildings and extensions is 46 years old which is lower than the provincial average of 55 years old.

Building	Original Construction	Extensions				
Noranda	1937					
Onslow	1945	2009				
Buckingham	1947	1962				
Golden Valley	1948	1960	1970	2008		
South Hull	1950	1953	1959	1975	1981	
Dr Wilbert Keon	1951	1961	1971			
Pierre Elliott Trudeau	1952	1961				
Hull Adult Education	1953					
Poltimore	1953	2018	2022			
Lord Aylmer Senior	1954	1957	1964			
Vacant - Campbell's Bay	1954					
Chelsea	1955	1985	1990			
Maniwaki Adult Education	1955					
Dr S. E. McDowell	1956	?				
St-Michael	1958	2018				
Centre L'Envol	1960					
Greater Gatineau	1960	2004	2017			
Lord Aylmer Junior	1961	2000				
Maniwaki Woodland	1963					
Hadley / Philemon Wright	1967					
Namur	1967	1973	2017			
Pontiac	1967	?				
St-John's	1981					
Vacant - Val D'Or	1991					
WQCC	1993	2000	2002	2009		
Queen Elizabeth	1996					
Eardley	2000					
Symmes / D'Arcy McGee	2003	2005				
Administrative Center	2008					
Wakefield	2013					

Type of Ventilation

The type of ventilation also has a major impact on the maintenance cost and the replacement cost. The following table shows the type of ventilation by buildings.

BUILDINGS	MECHANICALLY VENTILATED	NON MECHANICALLY VENTILATED	PARTIALLY MECHANICALLY VENTILATED	PORTION MECHANICALLY VENTILATED
Administrative Centre	X			
Buckingham			Х	Gymnasium
Centre L'Envol			Х	Gymnasium
Chelsea	X			Entire school EXCEPT Multi Purpose Room and Gymnasium
Dr S. E. McDowell			x	Gymnasium
Dr Wilbert Keon			X	Centre Wing - Lab, Gymnasium, Administration
Eardley	X			
Golden Valley			Х	2008 Extension
Greater Gatineau			Х	2004 and 2017 Extensions and Administration
Hadley / Philemon Wright	X			
Hull Adult Education			X	Administration
Lord Aylmer Junior			X	2000 Extension and Gymnasium
Lord Aylmer Senior			Х	1964 Extension and Gymnasium
Maniwaki Adult Education		X		· ·
Maniwaki Woodland		X		
Namur	X			
Noranda		X		
Onslow		X		
Pierre Elliott Trudeau			X	Gymnasium and Administration
Poltimore			X	2018 and 2022 Extension
Pontiac			X	Entire school EXCEPT Welding Shop, Lab and Art room
Queen Elizabeth	Х			-
South Hull			x	1981 Extension, 2 Gymnasiums and administration
St-John's	X			
St-Michael			X	2018 Extension
Symmes / D'Arcy McGee	X			
Vacant - Campbell's Bay			Х	Gymnasium
Vacant - Val D'Or		X		
Wakefield	X			
WQCC	Х			

Energy Management

The provincial targets are the following:

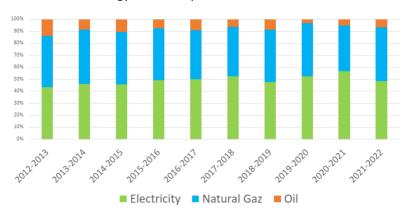
- Improve energy use efficiency by 15%
- Reduce the quantity of petroleum products consumed in Québec by 40%
- Increase total renewable energy production by 25%
- Increase bioenergy production by 50%
- Eliminate the use of thermal coal in Québec.

At Western Quebec, we are using three sources of energy: Electricity, Natural Gas and Oil.

49% of our energy comes from electricity, 43% from natural gas and 8% from oil.

Seven of our buildings use oil:

- Buckingham
- Chelsea
- Dr. S.E. McDowell
- Dr. Wilbert Keon
- Onslow
- Pontiac High School
- Vacant 26 Leslie



0-5 Years Required Investment

At WQSB, we have 9 buildings considered good condition based on the condition index.

As a priority, we must ensure that investments help improve the condition index of buildings.

The table below shows the required investments 0-5 years by group elements of the building.

Building	Investn	nent 0-5 years	Sub	structure	Sh	ell	Int	eriors	Se	rvices	Eq	uipment	Bui	ilding Sitework
Administrative Center	\$	597,977	\$	-	\$	83,120	\$	67,489	\$	127,985	\$	-	\$	319,383
Buckingham	\$	6,532,426	\$	-	\$	1,094,311	\$	1,528,479	\$	3,909,636	\$	-	\$	-
Centre L'Envol	\$	1,220,281	\$	-	\$	227,931	\$	229,841	\$	192,891	\$	-	\$	569,618
Chelsea	\$	4,600,043	\$	-	\$	592,980	\$	1,480,205	\$	2,410,396	\$	-	\$	116,462
Dr S. E. McDowell	\$	9,443,766	\$	195,110	\$	3,989,332	\$	678,410	\$	3,261,421	\$	40,355	\$	1,279,138
Dr Wilbert Keon	\$	7,449,471	\$	17,486	\$	2,061,650	\$	1,633,244	\$	2,852,550	\$	-	\$	884,541
Eardley	\$	4,067,921	\$	-	\$	1,428,289	\$	287,919	\$	778,858	\$	-	\$	1,572,855
Golden Valley	\$	3,933,399	\$	-	\$	1,543,643	\$	1,016,319	\$	793,133	\$	55,484	\$	524,820
Greater Gatineau	\$	3,236,105	\$	78,072	\$	883,790	\$	470,898	\$	976,771	\$	-	\$	826,573
Hadley / Philemon Wright	\$	25,969,589	\$	48,425	\$	6,030,749	\$	2,509,517	\$	10,624,547	\$	110,736	\$	6,645,615
Hull Adult Education	\$	2,903,917	\$	-	\$	579,989	\$	430,865	\$	1,893,064	\$	-	\$	-
Lord Aylmer Junior	\$	5,200,366	\$	15,677	\$	1,211,176	\$	442,375	\$	1,431,305	\$	-	\$	2,099,833
Lord Aylmer Senior	\$	2,237,445	\$	44,097	\$	578,211	\$	113,005	\$	945,737	\$	-	\$	556,396
Maniwaki Adult Education	\$	379,239	\$	34,683	\$	78,157	\$	53,130	\$	147,730	\$	-	\$	65,540
Maniwaki Woodland	\$	1,346,630	\$	6,801	\$	759,573	\$	232,954	\$	259,960	\$	-	\$	87,342
Namur	\$	887,089	\$	-	\$	158,694	\$	378,391	\$	350,004	\$	-	\$	-
Noranda	\$	5,347,683	\$	188,860	\$	1,396,751	\$	823,036	\$	687,236	\$	-	\$	2,251,799
Onslow	\$	2,229,291	\$	8,641	\$	681,766	\$	361,061	\$	467,873	\$	-	\$	709,949
Pierre Elliott Trudeau	\$	7,338,133	\$	3,963	\$	784,197	\$	1,599,391	\$	4,950,582	\$	-	\$	-
Poltimore	\$	358,362	\$	-	\$	35,484	\$	141,778	\$	181,100	\$	-	\$	-
Pontiac	\$	11,262,960	\$	69,513	\$	863,684	\$	1,697,892	\$	4,285,995	\$	115,632	\$	4,230,244
Queen Elizabeth	\$	1,597,823	\$	-	\$	679,182	\$	384,502	\$	281,459	\$	-	\$	252,680
South Hull	\$	3,541,694	\$	48,997	\$	839,863	\$	907,205	\$	1,072,337	\$	-	\$	673,292
St-John's	\$	3,508,192	\$	39,336	\$	645,573	\$	391,155	\$	1,443,423	\$	58,517	\$	930,187
St-Michael	\$	2,751,547	\$	-	\$	956,517	\$	742,295	\$	836,901	\$	-	\$	215,834
Symmes / D'Arcy McGee	\$	3,984,438	\$	-	\$	1,848,048	\$	315,088	\$	848,880	\$	-	\$	972,422
Vacant - Campbell's Bay	\$	2,302,100	\$	7,339	\$	670,154	\$	205,648	\$	913,981	\$	-	\$	504,977
Vacant - Val D'Or	\$	1,264,884	\$	-	\$	439,725	\$	180,850	\$	506,693	\$	-	\$	137,615
Wakefield	\$	598,907	\$	-	\$	-	\$	-	\$	598,907	\$	-	\$	-
WQCC	\$	3,139,879	\$	-	\$	950,208	\$	931,995	\$	688,620	\$	-	\$	569,057
Total	\$	129,231,557	\$	807,001	\$3	32,092,748	\$2	0,234,938	\$	48,719,972	\$	380,723	\$	26,996,175

Substructure	Foundations
	Basement Construction
Shell	Superstructure
	Exterior Enclosure
	Roofing
Interiors	Interior Construction
	Stairs
	Roofing
Services	Conveying (Elevator, Escalator,) Systems
	Plumbing
	Heating, Ventilating and Air Conditioning (HVAC)
	Fire Protecting Systems
	Electrical Systems
Equipment	Specialized Integrated Equipment
Building Sitework	Site Improvements
	Civil/Mechanical Utilities
	Site Electrical Utilities

Budget Source and Investment Projects

Accessibility

Implementation of corrective work to improve accessibility to buildings for persons with disabilities.

Availability for 2023-2024

Budget Source	Budget Source Description	
Measure	30850 – Accessibility	\$ 366,069

Project Authorization

In collaboration with the MEQ and the Office des personnes handicapées du Québec

Investment Projects

Category	Building	Description	Estimation
QoS	PETES	Adding an elevator	\$ 366,069

Transformation

To modify the configuration of a school building to allow for a change in use.

To provide improved functionality.

To add components that are not present in the existing building.

Availability for 2023-2024

Budget Source	Description	Amount
Measure	50624/60% - Building Transformation	\$ 719,828

Project Authorization

Projects are authorized by the organization.

Standard Schedule

Date	Task	Authority for Go / No Go
April School Year 1	Plans and Specifications	
June School Year 1	Tender if required	Director
June School Year 1	Construction	
September School Year 2	In Service / Project Completion	

Investment Projects

Category	Building	Description	Estimation
HEALTH & SAFETY	All Schools	Review the signs (Parking, Street sign, Assembly point)	\$ 80,000
HEALTH & SAFETY	Golden Valley	Add screens to windows	\$ 20,000
QoS	Greater Gatineau	Changing of a Classroom to a Nurturing Support Centre	\$ 30,000
QoS	Greater Gatineau	Transform the photocopier room to a Special Needs room	\$ 10,000
HEALTH & SAFETY	St-John's	Installation of Blinds	\$ 130,000
HEALTH & SAFETY	Multiple Schools	Upgrade protective surfacing in all playgrounds	\$ 260,000
Contingen	су		\$ 189,828

Renovation

For the maintenance or restoration of the physical condition of a building.

For the work to ensure compliance with codes or standards.

For the correction to infrastructure that has a documented major problem that could compromise the health and safety of occupants.

Availability for 2023-2024

Budget Source	Description	Amount
Measure	50624/40% - Building Renovation	\$ 479,885
Measure	50621 – Building maintenance	\$ 10,005,186
Measure	50622 – Resorption of the maintenance	\$ 4,189,758
Total	deficit	\$ 14,674,829

Project Authorization

In collaboration with the MEQ

Standard Schedule

Date	Task	Authority for Go / No Go
September School Year 1	Request sends to MEQ	Council of Commissioners
October School Year 1	Approval/Refusal from MEQ	MEQ
October School Year 1	Assignation to professionals	
October School Year 1	Plans and Specifications	

February School Year 2	Tender for construction	
April School Year 2	Contracts with construction company	Council of Commissioners
May School Year 2	Construction	
September School Year 3	In Service	
December School Year 3	Project Completion	

Investment Projects

Category	Building	Description	Estimation
QoS	Buckingham	Replace washroom stalls 1.226 and 0.136	\$ 13,000
QoS	Chelsea	Replace 15 gym lights to LED lights	\$ 21,000
QoS	Chelsea	Repave Basketball Court	\$ 15,000
QoS	Dr. Wilbert Keon	New stalls in the boy's washroom – High School	\$ 8,000
Quis	Eardley	Sink, countertop, and cabinets in staffroom	\$ 6,000
	Greater Gatineau	Reinvestigate the field drainage and correct the manhole level	\$ 10,000
(S)	Hadley / Philemon Wright	Replace floor in room 1.208 (Dance class)	\$ 8,000
QoS	Hadley / Philemon Wright	Add a door from the hallway to room 2.300	\$ 5,000
Quis	Lord Aylmer Senior	Replace the ventilation system isolation	\$ 50,000
QoS	Lord Aylmer Senior	Replacement of Stalls in Boys' Washroom	\$ 8,000
QoS	Maniwaki Adult Education	Replace exhaust fans in boys and girl's washroom	\$ 5,000
HEALTH & SAFETY	Maniwaki Woodland	Land Levelling – Protective surface	\$ 100,000
QoS	Pontiac	Replace 3 exterior shop doors	\$ 15,000
QoS	South Hull	Review the heating system	\$ 60,000
HEALTH & SAFETY	St-Michael's	Electrical wiring on the roof to avoid ice build up	\$ 100,000
QoS	Symmes / D'Arcy McGee	Repair windows metal covering	\$ 20,000
QoS	Symmes / D'Arcy McGee	Request to change the existing blue metal stall dividers to anti-graffiti ones.	\$ 20,000
Q.05	Symmes / D'Arcy McGee	Repaint the line on the gym floor at D'Arcy	\$ 30,000
HEALTH & SAFETY	Symmes / D'Arcy McGee	Replace window screens (60)	\$ 6,000
1	Chelsea	Heating System Phase 2	\$ 600,000

(b)	Dr. S.E. McDowell	Heating System - Convert Oil to Electric	\$ 1,100,000
QooS	Dr. Wilbert Keon	Elementary Washrooms	\$ 650,000
1	G. Theberge	Painting	\$ 75,000
QoS	Greater Gatineau	Ventilation system	\$ 1,400,000
1	Greater Gatineau	Painting	\$ 85,000
600	Hadley / Philemon Wright	Parking Phase 3	\$ 1,700,000
INTEGRITY	Hadley / Philemon Wright	Roof Phase 2	\$ 1,200,000
QoS	Hadley / Philemon Wright	Plumbing Works	\$ 150,000
*	Hull Adult Education	Boiler	\$ 900,000
*	Lord Aylmer Junior	Boiler	\$ 250,000
INTEGRITY	Maniwaki Woodland	Repairing infrastructure due to flooding	\$ 800,000
INTEGRITY	Noranda	Exterior Finishing	\$ 1,000,000
*	Onslow	Heating System	\$ 1,000,000
*	South Hull	Boiler	\$ 550,000
Continger	ncy		\$ 2,114,829

Technology

This budget is for the replacement of the devices for students and staff including the interactive display in the classroom and the robotic.

This budget is also for the maintenance and development of the IT Infrastructure.

Availability for 2023-2024

Budget Source	Description	Amount
Measure	50761 – NTIC	\$ 917,124
Measure	50766 – Vocational Training Tools	\$ 47,502
Measure	50793 – Telecommunication	\$ 189,181
	Infrastructure	
Measure	50750 – IT Development	\$ 208,095
Total		\$ 1,361,902

Investment Projects

Devices

For the replacement of the devices for students and staff, the organization agreed to this distribution model.

Standard	Replacement Cycle	Annual Budget for Replacement	Annual Quantity Replaced (Estimation)
One interactive display per classroom	10-year cycle	\$ 121,000	40
One laptop per teacher	5-year cycle	\$ 153,000	153
One laptop per administrative staff*	5-year cycle	\$ 100,000*	100
One laptop per student with Special Exam Conditions	6-year cycle	\$ 78,000	78
Student devices, robots, and other equipment	6-year cycle	\$ 241,974	

^{*}Cover by the FTE

Vocational Training

QoS	\$ 47,502
Specific technology devices and equipment	
required for the programs	

IT Infrastructure

For the maintenance and development of the IT Infrastructure, the plan projects for the 2023-2024 budget are the following:

Investment	Estimated Budget
Replacement of Access Points	\$ 75,000
Replacement of Core Switches	\$ 100,000
HEALTH & SAFETY Replacement of the firewalls	\$ 250,000
Replacement of UPS	\$ 85,000

Contingency

Since the model is based on the number of students, staff, and classrooms and since the population is increasing, we are keeping a contingency of \$ 210,426.

Furniture, Tools, and Equipment (FTE)

Availability for 2023-2024

Budget Source	Description	Amount
Grant	Based amount	\$ 60,826
Grant	Elementary, Secondary and Adult Ed.	\$ 413,485
Grant	Vocational Training	\$ 103,964
Measure	18014 – Support for school	\$ 151,147
	perseverance	
Grant	Distance Schools	\$ 8,412
Total		\$ 731,834

A portion of the budget is centralized for the replacement of equipment.

Reason	Used by	Value	Lifespan	Yearly
				replacement
				value
Defibrillators	All Schools	\$ 66,000	8 years	\$ 8,250
Equipment on wheels (Scissor lift, Trailers)	All Schools	\$ 60,000	30 years	\$ 2,000
Tools for Maintenance and Technicians (Drills, Network tester,)	All Schools	Based on av year	verage ly expense	\$ 15,000
Samboni (Caretaking)	All Schools	\$ 210,000	10 years	\$ 21,000
Administrative devices	All Schools	\$ 625,000	5 years	\$ 125,000
Board Office	Departments	\$ 1000/de	partment	\$ 7,000
Exterior Camera (Project)	All Schools	Estimation \$ 312,000	8 years	\$ 39,000
Furniture Replacement	All Schools	\$ 10,800,000	43 years	\$ 250,000
. 1411				¢ 467.250
Total Centralized				\$ 467,250
Total Decentralized				\$ 264,584