

School Facility Evaluation Project  
Part III - Space Adequacy

School Name:	RENFREW ELEMENTARY			School Code:	9229	
Location:	1210 RUSSET RD. N.E.			Facility Code:	1490	
Region:	CALGARY SOUTH			Superintendent:	DR. DONNA MICHAELS	
Jurisdiction:	CALGARY SCHOOL DISTRICT #19			Contact Person:	LEANNE SOLIGO	
				Telephone:	(403) 214-1123	
Grades:	1 - 6			School Capacity:	350	
<b>Building Section</b>	<b>Year of Compl.</b>	<b>No. of Floors</b>	<b>Gross Bldg Area (Sq.M.)</b>	<b>Type of Construction (i.e., structure, roof, cladding)</b>	<b>Description of Mechanical Systems (incl. major upgrades)</b>	<b>Comments/Notes</b>
Original Building	1954	1	2111.80	Masonry, built-up roof; mainly stucco with painted corrugated siding	Steam heating system to unit ventiaitors. Genreal exhaust system provided.	
Additions/ Expansions	NA					
					Evaluator's Name:	NORMAN DOBELL
					& Company:	NORMAN DOBELL & ASSOC. ARCH.

Upgrading/ Modernization (identify whether minor or major)	N/A					
Portable Struct. (identify whether attached/perman. or free-standing/ relocatable)	1999	1	83.00	Frame, flat roof, metal siding	Served by gas-fired furnace system	Freestanding
List of Reports/ Supplementary Information						

School Facility Evaluation Project  
Part III - Space Adequacy

	Evaluation Components	Summary Assessment			Estim. Cost
1	Site Conditions	Asphalt paving over gravel-base parking			\$17,400
2	Building Exterior	Window replacement and re-stucco required			\$163,900
3	Building Interior	Replace hall tile, linoleum, and carpet in classrooms			\$153,400
4	Mechanical Systems	While systems are generally in good working order, systems are over 45 years old and past life expectancy.			\$330,000
5	Electrical Systems	Install surge protection on the electrical system. More receptacles needed in the corridors. Retrofit lighting throughout to improve colour rendition and efficiency. Door contacts should be installed on all exterior doors			\$149,500
6	Portable Buildings	The portable classrom has a furnace system only, and cannot provide adequate ventilaion.			\$22,500
7	Space Adequacy:				
	7.1 Classrooms	Surplus	223		
	7.2 Science Rooms/Labs	Deficient	-14		
	7.3 Ancillary Areas	Deficient	-157		
	7.4 Gymnasium	Deficient	-195		
	7.5 Library/Resource Areas	Surplus	59		
	7.6 Administration/Staff Areas	Deficient	-233		
	7.7 CTS Areas	NA	0		
	7.8 Other Non-Instructional Areas (incl. gross-up)	Deficient	-233		
	Overall School Conditions & Estim. Costs	Surplus	319		\$836,700

Section 1	Site Conditions	Rating	Comments/Concerns	Estim. Cost
1.1	General Site Conditions			
1.1.1	Overall site size.	4	Adequate	
1.1.2	Outdoor athletic areas.	4	Playfields	
1.1.3	Outdoor playground areas, including condition of equipment and base.	4	Good repair	
1.1.4	Site landscaping.	4	Shrubs, new trees	
1.1.5	Site accessories (i.e., perimeter and other fencing, guard rails, bike stands, flag poles).	4	Good repair	
1.1.6	Surface drainage conditions (i.e., drains away from building, signs of ponding).	4	Good drainage	
1.1.7	Evidence of sub-soil problems.	4	None evident	
1.1.8	Safety and security concerns due to site conditions.	4	None evident	
Other				

Section 1	Site Conditions	Rating	Comments/Concerns	Estim. Cost
1.2	Access/Drop-Off Areas/Roadways/Bus Lanes			
1.2.1	Vehicular and pedestrian access points (i.e., size, number, visibility, safety).	4	City streets	
1.2.2	Surfacing of on-site road network (note whether asphalt or gravel).	N/A		
1.2.3	Bus lanes/drop-off areas (note whether on-site or off-site).	4	City streets	
1.2.4	Fire vehicle access.	4	City streets	
1.2.5	Signage.	4	School signed	
Other				

Section 1	Site Conditions	Rating	Comments/Concerns	Estim. Cost
1.3	Parking Lots and Sidewalks			
1.3.1	Number of parking spaces for staff, students and visitors (including stalls for disabled persons).	4	22 spaces for staff, one handicap stall	
1.3.2	Layout and safety of parking lots.	4	Layout good	
1.3.3	Surfacing and drainage of parking lots (note whether asphalt or gravel).	3	Gravel - replace with asphalt	\$17,400
1.3.4	Layout and safety of sidewalks.	4	No problems	
1.3.5	Surfacing and drainage of sidewalks (note type of material).	4	Concrete - good drainage	
1.3.6	Curb cuts and ramps for barrier free access.	4	City streets	
Other				
	Overall Site Conditions & Estimated Costs			\$17,400

Section 2	Building Exterior	Rating	Comments/Concerns		Estim. Cost
2.1	Overall Structure		Bldg. Section	Description/Condition	
2.1.1	Floor structure and beams (i.e., signs of bending, cracking, heaving, settlement, voids, rust, stains).	4		Slab on grade - no problems noted	
2.1.2	Wall structure and columns (i.e., signs of bending, cracking, settlement, voids, rust, stains).	4		None evident	
2.1.3	Roof structure (i.e., signs of bending, cracking, voids, rust, stains).	4		No indication of problems	
Other					

Section 2	Building Exterior	Rating	Comments/Concerns		Estim. Cost
2.2	Roofing and Skylights <i>Identify the availability of an up-to-date inspection report or roofing program. Note if roof sections are of different ages and/or in varying states of repair.</i>		Bldg. Section or Roof Section	Description/Condition/Age	
2.2.1	Based on the inspection report (and to the extent possible, direct observation), assess and rate roof conditions and estimate costs for required improvements (i.e., covering materials, membrane, insulation, other components).	FI		Tar and gravel - further investigation required	
2.2.2	Roof accessories (i.e., ladders, stairs, hatches, masts, exhaust hoods, chimneys, gutters, downspouts, splashpads).	4		New in the last year	
2.2.3	Control of ice and snow falling from roof.	4		Flat roof	
2.2.4	Skylights (i.e., signs of distress, leaks, ice build-up, condensation, deteriorated materials/seals).	FI		Generally good repair but some leaking and condensation noted - review with roof condition (see 2.2.1)	
Other					

Section 2	Building Exterior	Rating	Comments/Concerns		Estim. Cost
2.3	Exterior Walls/Building Envelope		Bldg. Section	Description/Condition	
2.3.1	Exterior wall finishes (i.e., signs of deterioration, cracks, brick spalling, effluorescence, water stains).	2		Stucco deteriorating - Repair and seal.	\$15,800
2.3.2	Fascias, soffits, parapets (i.e., signs of looseness, stains, rust, peeling paint).	4		Good repair	
2.3.3	Building envelope (i.e., evidence of air infiltration/exfiltration through the exterior wall or ice build up on wall, eaves, canopy).	4		No problems noted	
2.3.4	Interface of roof drainage and ground drainage systems.	4		Internal roof drain to municipal system	
2.3.5	Inside faces of exterior walls (i.e., signs of cracks, water stains, dust spots).	4		None evident	
Other		2		Provide allowance for renovations required for boiler replacement.	\$10,000

Section 2	Building Exterior	Rating	Comments/Concerns		Estim. Cost
2.4	Exterior Doors and Windows		Bldg. Section	Description/Condition	
2.4.1	Doors (i.e., signs of deterioration, rusting metal, glass cracks, peeling paint, damaged seals, sealed unit failure).	3		Wood doors, require hardware and replacement.	\$17,000
2.4.2	Door accessories (i.e., latches, hardware, screens, locks, alarms, holders, closers, security devices).	4		Refer to item 2.4.1.	
2.4.3	Exit door hardware (i.e., safety and/or code concerns).	4		Refer to item 2.4.1.	
2.4.4	Windows (i.e., signs of deterioration, rusting metal, glass cracks, peeling paint, damaged seals, sealed unit failure).	3		Deteriorating - to be replaced	\$121,100
2.4.5	Window accessories (i.e., latches, hardware, screens, locks, alarms, holders, closers, security devices).	3		Original - replace (see 2.4.4)	
2.4.6	Building envelope (i.e., signs of heavy condensation on doors or windows).	4		None evident	
Other					
	Overall Bldg Exterior Condition & Estim Costs				\$163,900

Section 3	Building Interior - Overall Conditions	Rating	Comments/Concerns		Estim. Cost
3.1	Interior Structure		Bldg. Section	Description/Condition	
3.1.1	Interior walls and partitions (i.e., signs of cracks, spalling, paint peeling).	4		Good repair	
3.1.2	Floors (i.e., signs of cracks, heaving, settlement).	4		None evident	
Other					
3.2	Materials and Finishes		Bldg. Section	Description/Condition	
3.2.1	Floor materials and finishes.	3		Floors - battleship linoleum in all classrooms, 12/12 vinyl tiles in hallway; west hallway tiles to be replaced; carpet in library, room two, and administration offices to be replaced	\$81,000
3.2.2	Wall materials and finishes.	4		Block, plaster - painted	
3.2.3	Ceiling materials and finishes.	3		Acoustic tile - replace	\$72,400

Section 3	Building Interior - Overall Conditions	Rating	Comments/Concerns		Estim. Cost
3.2	Materials and Finishes (cont'd)		Bldg. Section	Description/Condition	
3.2.4	Interior doors and hardware.	4		Good repair	
3.2.5	Millwork	4		Newly upgraded	
3.2.6	Fixed/wall mounted equipment (i.e., writing boards, tackboards, display boards, signs).	4		All whiteboards, tackboards, etc - Good	
3.2.7	Any other fixed/mounted specialty items (i.e., CTS equipment, gymnasium equipment).	4		Good repair	
3.2.8	Washroom materials and finishes.	4		Floor - mosaic tile; walls - painted block; ceiling - plaster; partitions - metal	
Other					

Section 3	Building Interior - Overall Conditions	Rating	Comments/Concerns		Estim. Cost
3.3	Health and Safety Concerns --- <i>Intent is to identify renovations considered necessary to meet applicable codes, primarily due to safety concerns. Basis of evaluation should be an up-to-date inspection report from the authority having jurisdiction together with direct observations as appropriate. Evaluator should note if in his opinion a comprehensive code evaluation is required.</i>		Bldg. Section	Description/Condition	
		4		Non-combustible, non-sprinklered	
		4		Appear compliant	
		4		Plaster walls, metal doors	
		4		Appear compliant	
		4		Good access from city streets and to class areas; handicap washroom provided	
		FI		See report	
		4		None evident	
	Overall Bldg Interior Condition & Estim Costs				\$153,400

Section 4	Mechanical Systems	Rating	Comments/Concerns		Estim. Cost
4.1	Mechanical Site Services				
4.1.1	Site drainage systems (i.e., surface and underground systems, catch basins).	4		Site drainage consists of grading to swales to run-off to streets.	
4.1.2	Exterior plumbing systems (i.e., irrigation systems, hose bibs).	4		Building has exterior hose bibbs.	
4.1.3	Outside storage tanks.	NA		Not applicable.	
Other					
4.2	Fire Suppression Systems		Bldg. Section	Description/Condition	
4.2.1	Fire hydrants and siamese connections.	4		Street fire hydrant is located adjacent to school.	
4.2.2	Fire suppression systems (i.e., pumps, sprinklers, piping, reservoirs, hoses, stand pipes, CO2 systems).	4		Fire protection consists of 40 mm hose and hose reels tied to building service.	
4.2.3	Hand extinguishers, blankets and showers (i.e., in CTS areas).	4		Hand extinguishers located throughout.	
4.2.4	Other special situations (e.g., flammable storage areas, science labs, CTS areas).	NA		Not applicable.	
Other					

Section 4	Mechanical Systems	Rating	Comments/Concerns		Estim. Cost
4.3	Water Supply and Plumbing Systems		Bldg. Section	Description/Condition	
4.3.1	Domestic water supply (i.e., pressure, volume, quality note whether municipal or well supply).	4		100 mm service from street, service runs to 50 mm meter. Service to building tied to municipal service.	
4.3.2	Water treatment system(s).	NA		Not applicable.	
4.3.3	Pumps and valves (including backflow prevention valves).	5		Backflow protection on all services recently completed.	
4.3.4	Piping and fittings.	4		All piping on domestic is copper and is in good shape for age of the facility. Lines are not insulated.	
4.3.5	Plumbing fixtures (i.e., toilets, urinals, sinks)	3		Fixtures are adequate. Require on going maintenance as necessary.	\$10,000
4.3.6	Domestic hot water system (i.e., heater, storage tanks, failure alarms, pressure, volume, recirculation).	4		One new self contained hot water gas fired.	
4.3.7	Sanitary and storm sewers, including sumps and pits (note whether sewage system is municipal or septic).	4		Services tied to municipal mains.	
Other					

Section 4	Mechanical Systems	Rating	Comments/Concerns		Estim. Cost
4.4	Heating Systems		Bldg. Section	Description/Condition	
4.4.1	Heating capacity and reliability (including backup capacity).	2		Single Ingliss low pressure boiler installed in 1954. Unit supplies heat for entire school. Unit operates well, but due to age, boiler should be considered for replacement.	\$105,000
4.4.2	Heating controls (including use of current energy management technology).	3		Controls are all pneumatic and to a large extent original. No current energy technology is employed. See controls. Refer to 4.7.1.	
4.4.3	Fresh air for combustion and condition of the combustion chimney.	4		Combustion air is in place and acceptable.	
4.4.4	Treatment of water used in heating systems.	4		Treatment systems are current.	
4.4.5	Low water cutoff/pressure relief valves and failure alarms (i.e., hot water heating).	4		Acceptable.	
4.4.6	Heating air filtration systems and filters.	NA		Not applicable.	
4.4.7	Heating humidification systems and components.	NA		Not applicable.	

Section 4	Mechanical Systems	Rating	Comments/Concerns		Estim. Cost
4.4	Heating Systems (cont'd)		Bldg. Section	Description/Condition	
4.4.8	Heating distribution systems (i.e., piping, ductwork) and associated components	2		School is all steam distribution and should be considered for replacement along with boiler. Piping is generally good. See heating. Refer to 4.4.1.	
4.4.9	Heating piping, valve and/or duct insulation.	2		Generally steam piping insulated throughout, condensate lines are not and should be done if system is kept.	\$10,000
4.4.10	Heat exchangers.	N/A		Not applicable.	
4.4.11	Heating mixing boxes, dampers and linkages.	3		Unit ventilators have mixing sections throughout and are prone to problems related to fresh air operations as well as proper distribution in rooms. See heating. Refer to 4.4.1.	
4.4.12	Heating distribution/circulation in larger spaces (i.e., user comfort, temperature of outside wall surfaces).	3		Subject to some areas of discomfort due to unit ventilator performance and lack of any air in some areas. Refer to 4.4.1.	
4.4.13	Zone/unit heaters and controls.	4		Generally ok.	
Other					

Section 4	Mechanical Systems	Rating	Comments/Concerns		Estim. Cost
4.5	Ventilation Systems		Bldg. Section	Description/Condition	
4.5.1	Air handling units capacity and condition.	2		Has no air supply system, depends on unit ventilators in both classrooms and gym. Gym has gravity vents for summer use. New ventilation distribution provided for recently renovated office area.	\$110,000
4.5.2	Outside air for the occupant load (if possible, reference CFM/occupant).	2		Refer to item 4.5.1	
4.5.3	Air distribution system (if possible, reference number of air changes/hour).	2		Design of unit ventilators would give 6 to 7 air changes. This is less likely now due to age of equipment. Refer to item 4.7.1.	
4.5.4	Exhaust systems capacity and condition.	2		School has one central exhaust fan which exhausts classrooms, storage areas, and washrooms through common system. Gym has separate exhaust fan.	\$30,000
4.5.5	Separation of out flow from air intakes	4		Separation of exhaust and intakes is acceptable.	
4.5.6	Special/dedicated ventilation and/or exhaust systems (i.e., kitchen, labs, CTS areas).	N/A		Not applicable.	
Other					

Section 4	Mechanical Systems	Rating	Comments/Concerns		Estim. Cost
4.5	Ventilation Systems (cont'd)		Bldg. Section	Description/Condition	
	<i>Note: Only complete the following items if there are separate ventilation and heating systems.</i>				
4.5.7	Ventilation controls (including use of current energy management technology).	3		School has no ventilation controls. Refer to 4.5.1.	
4.5.8	Air filtration systems and filters.	4		Unit ventilators have fiberglass filters.	
4.5.9	Humidification system and components.	N/A		Not applicable.	
4.5.10	Heat exchangers.	N/A		Not applicable.	
4.5.11	Ventilation distribution system and components (i.e., ductwork, diffusers, mixing boxes, dampers, linkages).	4		Exhaust distribution ductwork is good shape.	
Other					

Section 4	Mechanical Systems	Rating	Comments/Concerns		Estim. Cost
4.6	Cooling Systems		Bldg. Section	Description/Condition	
4.6.1	Cooling system capacity and condition (i.e., chillers, cooling towers, condensers).	N/A		Not applicable.	
4.6.2	Cooling distribution system and components (i.e., ductwork, diffusers, mixing boxes, dampers, linkages)	N/A		Not applicable.	
4.6.3	Cooling system controls (including use of current energy management technology).	N/A		Not applicable.	
4.6.4	Special/dedicated cooling systems (i.e., labs, CTS areas).	N/A		Not applicable.	
Other					
4.7	Building Control Systems		Bldg. Section	Description/Condition	
4.7.1	Building wide/system wide control systems and/or energy management systems.	3		Building controls are pneumatic, no energy management, getting old. Major alarms are tied to off site monitoring.	\$65,000
	Overall Mech Systems Condition & Estim. Costs				\$330,000

Section 5	Electrical Systems	Rating	Comments/Concerns		Estim. Cost
5.1	Site Services				
5.1.1	Primary service capacity and reliability (i.e., access, location, components, installation, bus sizes - note whether overhead or underground).	4		There are two existing main services. The primary service is 400A, 120/240V, 1 phase, 3 wire which supplies all the lighting and receptacle power. The second service is 60A, 208V, 3 phase, 3 wire which supplies power to 1 fan and 1 pump. Both services are new and in good condition.	
5.1.2	Site and building exterior lighting (i.e., safety concerns).	3		Existing exterior lighting is in good condition. South end and centre court area require exterior lighting. Off site street lighting aids the north and west side.	\$3,000
5.1.3	Vehicle plug-ins (i.e., number, capacity, condition).	3		There are not sufficient stalls or power to the existing stalls. Install approximately 8 more power outlets to the stairs.	\$5,000
Other					
5.2	Life Safety Systems				
			<b>Bldg. Section</b>	<b>Description/Condition</b>	
5.2.1	Fire and smoke alarm systems (i.e., safety concerns, up-to-date technology, regularly tested).	1		Existing F.A. system does not meet code requirements. New system must be installed completed with all devices. Etc.	\$35,000
5.2.2	Emergency lighting systems (i.e., safety concerns, condition).	1		Existing system does not meet code requirements. Install new emergency lighting system.	\$13,000
5.2.3	Exit lighting and signage (i.e., safety concerns, condition).	1		Existing exit lighting system does not meet code requirements. Install new exit lighting.	\$5,000
Other					

Section 5	Electrical Systems	Rating	Comments/Concerns		Estim. Cost
5.3	Power Supply and Distribution		Bldg. Section	Description/Condition	
5.3.1	Power service surge protection.	3		Provide surge protection.	\$1,500
5.3.2	Panels and wireways capacity and condition.	4		Existing panels are old but still functional. There is approximately 5% space available.	
5.3.3	Emergency generator capacity and condition and/or UPS (if applicable).	N/A			
5.3.4	General wiring devices and methods.	3		Existing devices are in fair condition. More receptacles needed in corridors.	\$1,000
5.3.5	Motor controls.	4		Loose starters are old and still functioning. Replace with attrition.	
Other					

Section 5	Electrical Systems	Rating	Comments/Concerns		Estim. Cost
5.4	Lighting Systems		Bldg. Section	Description/Condition	
5.4.1	Interior lighting systems and components (i.e., illumination levels, conditions, controls).	3		Existing lighting system is in good condition. Most light levels (except corridors) are acceptable. Levels are as follows: corridors +3 (poor - more lights required), classrooms +52, administration +46, and gym +41. Install more corridor lighting.	\$24,000
5.4.2	Replacement of ballasts (i.e., health and safety concerns).	4		Replacement of ballasts are done as required.	
5.4.3	Implementation of energy efficiency measures and recommendations.	3		Recommend existing lighting be retrofitted with T8 lamp technology.	\$60,000
Other					

Section 5	Electrical Systems	Rating	Comments/Concerns		Estim. Cost
5.5	Network and Communication Systems		Bldg. Section	Description/Condition	
5.5.1	Telephone system and components (i.e., capacity, reliability, condition).	4		Existing phone system is in good condition.	
5.5.2	Other communication systems (i.e., public address, intercom, CCTV, satellite or cable TV).	4		Existing P.A. system is in good condition.	
5.5.3	Network cabling (if available, should be category 5 or better).	4		All existing cabling is done with category 5 wire.	
5.5.4	Network cabling installation (i.e., in conduit, secured to walls or tables).	4		All cabling has been installed in conduit.	
5.5.5	Wiring and telecommunication closets (i.e., size, security, ventilation/cooling, capacity for growth).	4		Equipment is installed in library storage room. Heating does not seem to be a problem with the size of the room.	
5.5.6	Provision for dedicated circuits for network equipment (i.e., hubs, switches, computers).	4		Equipment is supplied with dedicated circuits.	
Other					

Section 5	Electrical Systems	Rating	Comments/Concerns		Estim. Cost
5.6	Miscellaneous Systems		Bldg. Section	Description/Condition	
5.6.1	Site and building surveillance system (if applicable).	N/A			
5.6.2	Intrusion alarms (if applicable).	3		Existing system is in good condition. Door contacts need to be installed on exterior doors.	\$2,000
5.6.3	Master clock system (if applicable).	N/A			
Other					
5.7	Elevators/Disabled Lifts (If applicable)				
5.7.1	Elevator/lift size, access and operating features (i.e., sensing devices, buttons, phones, detectors).	N/A			
5.7.2	Condition of elevators/lifts.	N/A			
5.7.3	Lighting and ventilation of elevators/lifts.	N/A			
Other					
	Overall Elect. Systems Condition & Estim Costs				\$149,500

Section 6	Portable Buildings	Rating	Comments/Concerns	Estim. Cost
	<i>Note: Separate sheets can be completed, if necessary, for portable buildings of different ages and/or conditions.</i>			
6.1.1	Foundation and structure (i.e., signs of bending, cracking, settlement, rust, voids, stains).	4	None evident	
6.1.2	Roof materials and components (i.e., signs of deterioration, leaks, ice build-up).	4	Rolled roofing - flat roof	
6.1.3	Exterior wall finishes (i.e., signs of deterioration, cracks, water stains).	4	Prefinished metal siding	
6.1.4	Doors and windows (i.e., signs of deterioration, rusting hardware, glass cracks, peeling paint, damaged seals).	4	None evident	
6.1.5	Interior finishes (i.e., floors, walls, ceiling).	4	Floor - vinyl tile; walls - drywall; ceiling - lay-in acoustic tile	
6.1.6	Millwork (i.e., counters, shelving, vanities, cabinets).	4	Good	
6.1.7	Fixed/wall mounted equipment (i.e., writing boards, tackboards, display boards, signs)	4	Writing boards, tackboards - adequate	
6.1.8	Heating system.	3	Palmaire furnace sytem only	\$15,000
6.1.9	Ventilation system.	2	Refer to item 6.1.8.	
6.1.10	Electrical, communication and data network systems.	4	All systems are in good to excellent condition.	
6.1.11	Health and safety concerns (i.e., fire and smoke alarms, fire protection systems, exiting, fire resistance rating of materials).	3	Requires emergency lighting to be installed.	\$500
6.1.12	Barrier-free access.	2	Ramp required	\$7,000
	<b>Overall Portable Bldgs Condition &amp; Estim Costs</b>			<b>\$22,500</b>

School Facility Evaluation Project  
Part III - Space Adequacy

Section 7	Space Adequacy	This Facility			Equiv. New Facility			Surplus/ Deficiency	Comments/Concerns
		No.	Size	Total Area	No.	Size	Total Area		
7.1	Classrooms	13	64 TO 81	1023	10	80	800	223	
7.2	Science Rooms/Labs	1		81	1		95	-14	
7.3	Ancillary Areas (i.e., Art, Computer Labs, Drama, Music,)	2	70 83	153	2 1	90 130	310	-157	
7.4	Gymnasium (incl. gym storage)	1		278	1		473	-195	
7.5	Library/Resource Areas	1		219			160	59	
7.6	Administration/Staff, Physical Education, Storage Areas			148			381	-233	
7.7	CTS Areas								
	7.7.1 Business Education								
	7.7.2 Home Economics								
	7.7.3 Industrial Arts								
	7.7.4 Other CTS Programs								
7.8	Other Non-Instructional Areas (i.e., circulation, wall area, crush space, wc area)			815			817	-2	
	<b>Overall Space Adequacy Assessment</b>	18		2717	15		3036	-319	