# FACILITIES ASSESSMENT July 12, 2006

The materials in this packet were gathered as part of a Facilities study done by the district in 2005 (Public Business Consulting Group gathered the information). Enclosed are those pieces of information concerning "space". Not in the packet are pieces of information from the study regarding capital improvements, custodial needs, -- issues unrelated to space.

#### 5.0 School Program Capacities

A building utilization study evaluates how the classroom and classroom related spaces are used in a school building taking into account classroom sizes, types of programs or classes offered, and scheduling information. The process is fairly straightforward for elementary schools where each classroom typically has a designated use for the entire day, i.e. a 4th grade classroom for Ms. Jones or an art room for Mr. Smith. It is more complex for secondary schools, especially for high schools where classrooms may serve multiple purposes. The net result of a building capacity utilization study identifies how each classroom-sized space is used and determines the program capacities of each school.

Program capacity differs from building capacity which is determined by government regulated building codes and relates to how many people a building can safely house. Program capacity is a calculation of the functional capacity of a school specifically determining how many students can be served in a building based on curriculum, scheduling, and class size ratios. As an example, the building or room capacity of a high school fieldhouse with bleachers may be upwards of 2,500 people, whereas the program capacity for that same fieldhouse (gymnasium) might only be the size of the 2 or 3 physical education classes that the gymnasium can house at once.

With the help of the building principals and assistant principals, a detailed usage schedule was developed for all spaces large enough to be a classroom at each of the four schools. Those schedules were used in combination with the District's class size policies to calculate the program capacities. Tables summarizing these calculations are provided in Attachments 3 through 6. The program capacities for the four schools are:

Atwater Elementary School
Lake Bluff Elementary School
Shorewood Intermediate School
Shorewood High School
903

The table on the next page compares the program capacities versus the 2005-06 enrollment for each of the four schools. It is desirable to have approximately 10% excess capacity to handle any future enrollment growth, fluctuations in enrollments by grade level from year to year, future program additions, and other factors. Currently the Shorewood School District has approximately 25% excess capacity which is wonderful from a space perspective, but has negative consequences from a financial perspective in several ways, some which will be discussed in greater detail later in this report.

	Capacity Vers	us Enrollment	
School	Program Capacity	05-06 Enrollment	Excess Capacity
Atwater	666	508	158
Lake Bluff	723	498	225
SIS	375	321	54
SHS	903	683	220
District Totals	2,667	2,010	657

# Shorewood School District Program Capacity - Atwater Elementary School

	D	ecember 31	, 2005
		SSD	
Room	Use - # Students	Capacity	Miscellaneous Notes
1	Small Groups	23.71	
2	3rd - 25	23.71	
3	Art	N/A	Art room not counted against capacity
4	OT/PT	2.00	
5	ELL	23.71	
6	3rd - 24	23.71	
7	3/4 Multiage - 24	23.71	
8	1/2 Multiage - 21	23.71	
9	1/2 Multiage - 21	23.71	
10			Multipurpose
100			Cafetorium
101	_		
102	1st - 22	23.71	
103	EDB	23.71	
104	1st - 22	23.71	
105	Music	N/A	Music room not counted against capacity
106	4th - 23	23.71	-gant opposit
107 ·			Smaller room - reading support
108	PTA Room	23.71	, and a support
109	2nd - 21	23.71	
110	K (1/2 Day) - 14	23.71	
111	2nd - 22	23,71	
112	Band/Orch	23,71	Combined with room 113
113			
114			
115			
116			
117			
118		-	
119			
120			Gym
200	Science Lab	23.71	
201	33,31300 Lab	20.71	
202	6th - 21	23.71	
203	6th - 22	23.71	
204	Spanish	N/A	Spanish room not counted against capacity
205	6th - 21	23,71	operior room not counted against capacity
206	5th - 21	23.71	
207	5th - 20	23.71	
208	5th - 21	23.71	
209	5th - 20	23.71	
210	4th - 22	23.71	

		SSD	
Room	Use - # Students	Capacity	Miscellaneous Notes
211	3/4 Multiage - 23	23.71	
212			
213	Science Lab	23.71	
214	Computer Lab	23.71	
215			Library
	Program Capacity	666	

	Program Capacity	- Lake Blu	ıff Elementary School
		cember 31	
		SSD	
D	Use - # Students	4	BALL - H NI /
Room	Use - # Students	Capacity	Miscellaneous Notes
100			
101	2nd - 19	23.71	
102			
103	2nd - 19	23,71	
104			
105	1st - 18	23.71	
106			
107	EEN/ED Resource - 5 max	23.71	
108			Small room - combined with room 105
109	3rd - 21	23.71	
110			Small room - hearing impaired
111	3rd - 21	23.71	
112			
113	1st - 17	23.71	
114	Speech & Language - 3 max	23.71	
115			
116	1st - 18	23.71	
117	OT/PT - 2 max	2.00	
118			
119			
120	CD - 10	10.00	
121	014 M. III.	00.74	
122	3/4 Multiage - 22	23.71	
123	2/4 Multipera 00	22.74	
124	3/4 Multiage - 20	23.71	
125 126			
120			
128			
129			Gym
130			- Jin
131	1/2 Multiage - 22	23.71	
132			
133	1/2 Multiage - 22	23.71	
134			
135			
200			
201			Smaller room - science lab
202	5th - 22	23.71	
203			Library
204	Computer Lab	23.71	
205	Music - 24 max	23.71	
206	•		
207	Theatre & Instr. Music	N/A	One music room not counted against capac

		SSD	
Room	Use - # Students	Capacity	Miscellaneous Notes
Koom	USE - # Statents	Capacity	IANISCELIQUEORS MOSES
208			
209	5/6 Multiage - 21	23.71	
210	<u> </u>	23.71	
211	5/6 Multiage - 20	23.71	
212	6th - 18	23.71	•
213			
214	Art - 24 max	N/A	Art room not counted against capacity
215	Science Lab - 24 max	23.71	
216	Gifted & Talented	23.71	
217	LD Resouce - 6 max	23.71	
218	4th - 22	23.71	
219			
220	Spanish - 24 max	N/A	Spanish room not counted against capacity
221	Milestone Daycare Rental	23.71	
222			
223	5th - 22	23.71	
224			
225	5th - 23	23.71	
226			
227	4th - 21	23.71	
228			
229		00.74	No de de deservición de la constante de la con
M1	Empty	23.71 23.71	Need to address IAQ concerns
M2	Empty	23.71	Need to address IAQ concerns
	Program Capacity	723	

			ool District od Intermediate School
		cember 31	
		SSD	
Room	Use - # Students	Capacity	Miscellaneous Notes
103	Choir	1	
110	Title 1	2	
112	Language Arts	3	
118	Science/Spanish	4	
120	Science/Spanish	5	
122	Fitness Center	N/A	
G	Gymnasium	N/A	
000	A 1 10 - 1 1 01 - 11		
200	Language Arts/Social Studies	6 7	
202	Social Studies		
214	Language Arts/Social Studies	8	
216	Language Arts	9	
218	Social Studies	10	
220	Computer Lab	11	
224	ESL/Title 1	12	
228	Spanish	13	
230	French	14	
232	Art	15	
234	Band	16	
236	Orchestra	17	
238	Library	N/A	
300	Math	18	
302	Science	19	
304	Science	20	
312	Math	21	
314	Math	22	
316	Resource	23	
324	Studio	N/A	Room not configured for classroom
pecials:			
	Computer Lab (room 220)	1	
	Art (room 232)	1	
	Music (rooms 103,234,236)	3	1
	For. Lang. (rooms 228, 230)	2	
	Subtotal	7	
Sp. Ed.	Room 316	1	
Net	Total - Specials - Sp. Ed.	15	
	Lower Program Capacity	375	Based on 25 students per classroom
	Upper Program Capacity	435	Based on 29 students per classroom

Building   Room   Room Use   Full   # of   Room   Periods				Shorewood		School District				
Room   Room Use   Full   # of   Room			ogram	Capacity	•		chool			
Room         Room Use         Full         # of         Room           116         Title 1 Resource         X         5-11         8           200         Nova Net         X         5-13         8           200         Nova Net         X         5-13         8           200         Nova Net         X         5-13         8           200         Nova Net         X         18-27         29           204         Social Studies         X         22-27         29           205         Social Studies         X         15-26         29           206         Social Studies         X         15-26         29           215         Goal II         X         16-26         29           216         English         X         17-24         29           300         World Language         X         13-26         29           305         World Language         X         13-26         29           306         World Language         X         13-26         29           307         World Language         X         13-26         29           308         World Language         X <th></th> <th></th> <th></th> <th>Jan</th> <th>uary 2, 20</th> <th>90</th> <th></th> <th></th> <th></th> <th></th>				Jan	uary 2, 20	90				
Size         Kids         Capacity           116         Title 1 Resource         X         5-11         8           200         Nova Net         X         5-13         8           204         Social Studies         X         5-13         8           205         Social Studies         X         18-27         29           206         Social Studies         X         15-28         29           210         Library         X         15-28         29           210         Library         X         15-26         29           216         English         X         16-26         29           220         English         X         13-24         29           304         Social Studies         X         13-24         29           305         World Language         X         17-23         29           306         World Language         X         13-26         29           306         World Language         X         14-29         29           306         World Language         X         14-29         29           310         English         X         12-20         29	Building	Room		Fuil	# of	Room	Periods	9288	Calculated	10 N
116         Title 1 Resource         X         5-11         8           200         Nova Net         X         5-13         8           204         Social Studies         X         18-27         29           205         Social Studies         X         18-27         29           210         Library         X         15         15           214         Computer Lab         X         15         15           215         Goal II         X         3-9         5           216         English         X         16-26         29           200         World Language         X         17-24         29           304         World Language         X         17-29         29           305         World Language         X         17-29         29           306         World Language         X         17-29         29           307         World Language         X         17-24         29           308         World Language         X         13-26         29           316         English         X         13-29         29           316         Social Studies         X				Size	Kids	Capacity	Used	2622	Usage	Capacity
116         Title 1 Resource         X         5-11         8           200         Nova Net         X         5-13         8           204         Social Studies         X         18-27         29           205         Social Studies         X         15-13         8           210         Library         X         15         15           214         Computer Lab         X         15         15           216         English         X         16-26         29           200         World Language         X         16-26         29           304         Social Studies         X         17-24         29           305         World Language         X         17-24         29           306         World Language         X         17-24         29           307         World Language         X         17-24         29           308         World Language         X         17-24         29           309         World Language         X         17-24         29           310         English         X         14-29         29           316         English         X <td>. Administration</td> <td></td> <td></td> <td></td> <td></td> <td>(1) 10 (</td> <td>Land and the second second second</td> <td>1</td> <td></td> <td></td>	. Administration					(1) 10 (	Land and the second second second	1		
200         Nova Net         X         5-13         8           204         Social Studies         X         18-27         29           205         Social Studies         X         15         15           210         Library         X         15         15           214         Computer Lab         X         15         15           215         Goal II         X         15         15           216         English         X         21-28         29           220         English         X         17-24         29           300         World Language         X         17-24         29           305         World Language         X         13-26         29           306         World Language         X         13-24         29           307         World Language         X         13-24         29           310         English         X         18-26         29           310         World Language         X         18-29         29           310         World Language         X         18-29         29           310         English         X         18-29	and the state of t	<u>&gt;</u>	Title 1 Resource	×	2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2		場が変われ	がは見る	語が記れる	
204         Social Studies         X         18-27         29           205         Social Studies         X         15         15           210         Library         X         15         15           214         Computer Lab         X         15         15           215         Goal II         X         15         15           216         English         X         21-28         29           220         English         X         16-26         29           300         World Language         X         17-24         29           304         Social Studies         X         17-29         29           305         World Language         X         17-29         29           306         World Language         X         17-23         29           310         English         X         13-26         29           31         English         X         14-29         29           316         Social Studies         X         12-28         29           316         Social Studies         X         1-4         2           316         English         X         1-4	The state of the s	200		×	5-13	ω	1-7	7/7	1//	οα
205         Social Studies         X         22-27         29           210         Library         X         15         15           214         Computer Lab         X         15         15           215         Goal II         X         3-9         5           216         English         X         21-28         29           220         English         X         17-24         29           300         World Language         X         17-24         29           306         World Language         X         17-23         29           306         World Language         X         17-23         29           306         World Language         X         17-23         29           307         World Language         X         13-24         29           310         World Language         X         13-24         29           310         World Language         X         14-29         29           310         World Language         X         14-29         29           310         English         X         12-28         29           310         English         X		204	Social Studies	×	18-27	29	2,3,5-7	5/7	2/9	24
210         Library         X         15         15           214         Computer Lab         X         15         15           215         Goal II         X         3-9         5           216         ELL         X         3-9         5           216         English         X         21-28         29           220         English         X         17-24         29           300         World Language         X         17-29         29           306         World Language         X         17-29         29           306         World Language         X         17-23         29           307         World Language         X         13-26         29           308         World Language         X         17-23         29           310         English         X         13-26         29           310         English         X         18-28         29           316         Social Studies         X         18-28         29           320         English         X         18-28         29           4         Social Studies         X         26-29	A PROPERTY AND A STATE OF THE S	205	Social Studies	×	22-27	29	1-3,6	4/7	6/7	24
214         Computer Lab         X         15         15           215         Goal II         X         3-9         5           216         English         X         21-28         29           220         English         X         16-26         29           300         World Language         X         17-24         29           304         Social Studies         X         19-26         29           305         World Language         X         13-27         29           306         World Language         X         13-24         29           307         World Language         X         13-24         29           310         English         X         13-24         29           310         English         X         18-28         29           316         Social Studies         X         18-28         29           316         English         X         18-28         29           310         English         X         26-27         29           310         English         X         18-28         29           310         English         X         26-29		210	Library							
215       Goal II       X       15       15         ELL       X       3-9       5         216       English       X       21-28       29         220       English       X       16-26       29         300       World Language       X       17-24       29         305       World Language       X       17-23       29         306       World Language       X       13-26       29         309       World Language       X       13-24       29         310       English       X       13-24       29         310       English       X       18-26       29         312       English       X       18-26       29         316       LD Resource       X       18-26       29         316       English       X       18-28       29         320       English       X       18-28       29         320       English       X       18-28       29         4       Social Studies       X       22-27       29         8       126-28       X       26-29       29         128       He	**************************************	214	Computer Lab	×						
ELL       X       3-9       5         216       English       X       21-28       29         220       English       X       16-26       29         300       World Language       X       17-24       29         304       Social Studies       X       19-26       29         305       World Language       X       13-26       29         309       World Language       X       13-24       29         310       English       X       13-24       29         312       English       X       14-4       2         315       LD Resource       X       18-28       29         316       Social Studies       X       18-28       29         320       English       X       18-28       29         320       English       X       18-28       29         Building Total       X       18-28       29         126       Science       X       26-29       29         128       Health       X       26-29       29         128       Health       X       26-29       29         128       Health <td></td> <td>215</td> <td>Goal II</td> <td>×</td> <td>15</td> <td>15</td> <td>2,3</td> <td>2/7</td> <td>2/7</td> <td>4</td>		215	Goal II	×	15	15	2,3	2/7	2/7	4
216       English       X       21-28       29         220       English       X       16-26       29         300       World Language       X       17-24       29         304       Social Studies       X       17-29       29         305       World Language       X       13-26       29         306       World Language       X       13-24       29         310       English       X       13-24       29         311       ED Resource       X       19-29       29         315       LD Resource       X       19-29       29         316       Social Studies       X       18-28       29         316       Social Studies       X       18-28       29         320       English       X       18-28       29         Building Total       X       26-29       29         126       Science       X       26-29       29         128       Health       X       21-28       29         128       Health       X       21-28       29         130       Foods Lab       X       17-24       29 <td></td> <td></td> <td></td> <td>×</td> <td>თ-ი</td> <td>చ</td> <td>4,6,7</td> <td>3/7</td> <td>3/7</td> <td>. 2</td>				×	თ-ი	చ	4,6,7	3/7	3/7	. 2
220         English         X         16-26         29           300         World Language         X         17-24         29           304         Social Studies         X         14-29         29           305         World Language         X         19-26         29           306         World Language         X         13-27         29           309         World Language         X         13-24         29           310         English         X         19-26         29           311         ED Resource         X         19-29         8           316         English         X         18-28         29           316         Social Studies         X         18-28         29           320         English         X         18-28         29           320         English         X         18-28         29           320         English         X         26-27         29           320         English         X         26-29         8           4         Science         X         26-29         8           4         Science         X         26-29		216	English	×	21-28	29	1,3-5	4/7	2/9	24
300         World Language         X         17-24         29           304         Social Studies         X         14-29         29           305         World Language         X         13-26         29           306         World Language         X         13-27         29           309         World Language         X         13-24         29           310         English         X         13-24         29           311         ED Resource         X         19-29         29           315         LD Resource         X         5-9         8           316         Social Studies         X         22-27         29           320         English         X         18-28         29           320         English         X         18-28         29           4         X         X         26-29         29           4         X         X         21-28         29      <		220	-	×	16-26	29	2-4,6,7	5/7	2/9	. 24
304       Social Studies       X       14-29       29         305       World Language       X       17-23       29         306       World Language       X       13-27       29         310       World Language       X       13-27       29         310       English       X       13-24       29         311       ED Resource       X       19-29       29         316       Social Studies       X       18-28       29         320       English       X       26-29       X         126       Science       X       26-29       29         128       Health       X       21-28       29         128       Health       X       17-24       29		300	World Language	×	17-24	29	2-5	4/7	2/9	24
305       World Language       X       19-26       29         306       World Language       X       17-23       29         309       World Language       X       13-27       29         310       English       X       13-24       29         311       ED Resource       X       19-29       29         315       LD Resource       X       5-9       8         316       Social Studies       X       18-28       29         320       English       X       18-28       29         Building Total       X       26-29       29         126       Science       X       26-29       29         128       Health       X       21-28       29         128       Health       X       17-24       29	***************************************	304	Social Studies	×	14-29	29	1,3,4,6,7	5/7	2//9	24
306         World Language         X         17-23         29           309         World Language         X         13-27         29           310         English         X         13-24         29           311         ED Resource         X         19-29         29           315         LD Resource         X         5-9         8           316         Social Studies         X         18-28         29           320         English         X         18-28         29           320         English         X         18-28         29           320         English         X         26-29         29           126         Science         X         26-29         29           128         Health         X         21-28         29           130         Foods Lab         X         17-24         29		305	World Language	×	19-26	29	1-4,6,7	2/9	2/9	24
309       World Language       X       13-27       29         310       English       X       13-24       29         311       ED Resource       X       19-29       29         312       English       X       19-29       8         316       Social Studies       X       22-27       29         320       English       X       18-28       29         Building Total       X       18-28       29         126       Science       X       26-29       29         128       Health       X       21-28       29         130       Foods Lab       X       17-24       29		306	World Language	×	17-23	29	3-7	5/7	2/9	24
310       English       X       13-24       29         311       ED Resource       X       1-4       2         312       English       X       5-9       8         316       Social Studies       X       22-27       29         320       English       X       18-28       29         Building Total       X       18-28       29         126       Science       X       26-29       29         128       Health       X       21-28       29         130       Foods Lab       X       17-24       29		309	World Language	×	13-27	29	1-4,6,7	6/7	2/9	24
311       ED Resource       X       19-29       29         312       English       X       5-9       8         315       LD Resource       X       5-9       8         316       Social Studies       X       22-27       29         320       English       X       18-28       29         Building Total       X       26-29       29         126       Science       X       26-29       29         128       Health       X       17-24       29	***************************************	310	English	×	13-24	29	1,2,5-7	5/7	2/9	24
312       English       X       19-29       29         316       LD Resource       X       5-9       8         320       English       X       18-28       29         320       English       X       18-28       29         Building Total         126       Science       X       26-29       29         128       Health       X       21-28       29         130       Foods Lab       X       17-24       29		311	ED Resource		1-4	2	2-5,7	5/7	2/9	2
315       LD Resource       X       5-9       8         316       Social Studies       X       22-27       29         320       English       X       18-28       29         Building Total       X       26-29       29         126       Science       X       26-29       29         128       Health       X       21-28       29         130       Foods Lab       X       17-24       29		312	English	×	19-29	29	1,3-5,7	5/7	2/9	24
316         Social Studies         X         22-27         29           320         English         X         18-28         29           Building Total         Total         X         26-29         29           126         Science         X         26-29         29           128         Health         X         21-28         29           130         Foods Lab         X         17-24         29		315	LD Resource	×	5-9	8	1-7	717	2//2	8
320 English		316	Social Studies	×	22-27	29	1-3,5,6	5/7	2/9	24
Building Total		320	English	×	18-28	29	1-3,5,6	5/7	6/7	24
Building Total										
126         Science         X         26-29         29         7           128         Health         X         21-28         29         1           130         Foods Lab         X         17-24         29         1			Building Total							344
Science         X         26-29         29         1           Health         X         21-28         29         1           Foods Lab         X         17-24         29         1			の 一般 は 一般		And the second s				Confidential Confidence (Confidence Confidence Confiden	
Health         X         21-28         29           Foods Lab         X         17-24         29         1	**************************************	126	Science	×	26-29	29	1,2,4-7	7/9	6/7	24
Foods Lab X 17-24 29		128	Health	×	21-28	. 29	1-7	717	6/7	24
		130	Foods Lab	×	17-24	29	1-4,6,7	, 1/9	6/7	24

1000	NOOH OSE	Lan	‡ 01	Koom	Periods	Usage	Calculated	Net
		Size	Kids	Capacity	Used		Usage	Capacity
133	Computer Lab	X	15-34	29	1,2,6-8	5/7	2/9	24
134	New Horizons	×	7		1-3	3/7	3/7	3
136	Art	×	16-31	29	3,4,6,7	4/7	5/7	21
137	Math	×	21-26	29	1,2,4-6	5/7	6/7	24
140	Art	X	18-28	29	0,2,3,5.6	5/7	5/7	21
142	Art Storage	X(1)		29	N/A	2/0	5/7	21
226	Science	×	16-28	29	0,2,3,6	4/7	6/7	24
228	Science	×	19-21	29	1,3,5-7	5/7	2/9	24
230	Science	×	14-28	29	1-7	7/7	6/7	24
233	Math	×	17-27	29	1-3,5-7	6/7	6/7	24
234	Science Lab	×	15-25	29	1,2,4-7	2/9	2/9	24
236	Math	×	20-27	29	1-5,7	6/7	6/7	24
237	Math	X	24-28	29	1,3,4,6,7	5/7	2/9	24
240	Math	×	24-27	29	1,2,4,6,7	5/7	6/7	24
242	Math	X(1)	18-27	29	1-3	3/7	5/7	21
	Building Total	***************************************			V DOGGA WARRANTA			399
	Physical Educations 한 교육을 하는 공항에 하는 교육을			Control of the contro				
	North Gym	×	19-31	29	0-5	2/9	2/9	24
	Arena	X	18-29	29	2,4-7	5/7	6/7	24
	Youth Center	×	.11-27	29	2-6	2/17	5/7	21
	Building Total							69
Company of the Compan								
073	Costume Shop		4-19		7,8	2/7		
078	Orchestra	×	62-29	75	4,5	2/7	2/7	21
	Scene Shop		7-23		7,8	2/7		
173	Classroom	×	12-23	29	2,3,6,7	4/7	6/7	24 .
273	Choir	×	14-26	29	5,6	2/7	2/7	8
274	English	×	12-30	29	1,3,4,6	4/7	6/7	24
275	Music Library	×						711200000000000000000000000000000000000

Building	Room	Room Use	Full	# of	Room	Periods	Usage	Calculated	Net
			Size	Kids	Capacity	Used	, , , , , , , , , , , , , , , , , , , ,	Usage	۳
	276	Dance Studio	×					2	
	278	Band	×	43-49	50	4,5	2/7	2/7	14
		Building Total							91
							7,700		
School Program Capacity	acity		_		_ ,	<b></b>			903
				***************************************					
Notes:									
(1) Smaller room									

•

į

•

### 6.0 Staffing Evaluation:

A brief summary of the facilities department staffing levels is provided in Attachment 1. A much more detailed summary of the cleaning responsibilities of each custodian in the district was developed by the Shorewood School District facilities staff to help support this evaluation. Because the purpose of our work was to perform a more global assessment of the district facilities, a detailed time study for each employee was not included in the scope of our services. This type of evaluation could be useful to the district if a detailed evaluation of each employees work load was desired. Most districts have performed a time study of their custodial and maintenance staffs at some point in time to ensure uniform work loads and work loads appropriate for the amount of hours each employee is paid for. This type of evaluation is discussed in Section 10.0 of this report. Our assessment did include a staffing evaluation comparing the Shorewood School District facilities department to the Whitefish Bay School District facilities department. In addition, the Shorewood staffing levels were compared to regional and national data.

Because of the proximity of the two districts and because they are of comparable size, we were asked to compare the facilities department staffing of the Shorewood School District to the Whitefish Bay School District. Shorewood has 29 employees serving its four schools, which total 588,643 square feet. Whitefish Bay has 30 full-time equivalent (29 full-time and 2 part-time) employees serving its four schools, which total 610,000 square feet. The table on the following page provides a comparison of the two districts facilities department staffing. There are some key observations that can be made in the comparison of the two districts. The first is that Shorewood is serving it's schools with one fewer employee; however the two school district's have very similar staffing levels on a per square foot basis. There is however a fairly large disparity when we compare the number of students per facilities department staff member for the two districts. This metric is not extremely valuable to facilities professionals as building size and acreage better relate to staffing needs than enrollment does; however, it does become very important when you consider that public school funding is so closely tied to student enrollment. This disparity is consistent with the discussion in the previous section of this report related to the excess capacity of the Shorewood schools. To further illustrate the excess capacity of the Shorewood schools consider the following comparison:

• Building Square Footage Per Number of Students:

Shorewood: 292.5 sq. ft. per student
Whitefish Bay: 205.2 sq. ft. per student

Whitefish Bay is using less space to serve each student which leads to greater efficiencies not only with staffing but also with other maintenance and custodial operating costs and utility expenditures.

Facilities Dep	partment Staffing Co	mparison
	Shorewood	Whitefish Bay
Building Square Footage	588,643	610,000
Acreage	27	40
Custodial Employees	21	24
Maintenance/Grounds Empl.	6.5	. 4
Office Employees	1.5	2
Total Employees	29	30
Enrollment	2,010	2,972
Sq. ft. per custodial staff	28,031	25,417
Sq. ft. per total staff	20,298	20,333
Students per total staff	69.3	99.1

Although Whitefish Bay provides an excellent comparison, it is important to also draw comparisons to regional and national averages to see where a district stands. One of the drawbacks to regional and national data is that the quality of the data is always a little suspect since there typically is not a great deal of consistency in how people provide their data. However, because there is such a large database, much of this inconsistency becomes irrelevant. We use Midwest regional factors applied to national averages to obtain the best comparisons for school districts in Wisconsin. The table on the next page shows how Shorewood compares to these averages which are for salary only (no benefits) not including overtime. Shorewood compares rather favorably on a square footage basis but not on a per student basis, not surprising based on the comparison with Whitefish Bay. Typically the dollar values for Wisconsin districts fair well against these averages because the rate of pay in Wisconsin is a little lower than some of the school districts in larger Midwestern cities such as Chicago, Minneapolis, and Indianapolis which dominate the data, and that is no doubt one of the factors in the per square foot comparison. However, despite this fact, Shorewood still exceeds the regional averages when looking at per student spending further supporting the information obtained in the comparison with the Whitefish Bay School District.

Staffing Comparis	on Against Regiona	al Averages
	Shorewood	Regional Average
Custodial staffing per sq. ft.	\$1.03	\$1.43
Custodial staffing per student	\$302.83	\$230.41
Maintenance staffing per sq. ft.	\$0.58	\$0.72
Maintenance staffing per student	\$171.33	\$93.33
Total staffing per sq. ft.	\$1.62	\$2.15
Total staffing per student	\$474.16	\$323.74

### 7.0 Budget Evaluation:

The Shorewood School District facilities budget was evaluated in several ways. The first step was to combine the annual general fund and community service fund budgets together and to determine the percentage breakdown amongst major budget categories. The table below summarizes the Shorewood facilities budget.

Facilities B	udget Sum	mary
Budget Area	Budget	% of Total
Salaries	1,274,575	37.67
Benefits	690,068	20.39
Contracted Services	418,501	12.37
Major Maintenance	120,000	3.55
Utilities	647,902	19.15
Supplies/Materials	137,812	4.07
Equipment	94,000	2.78
Miscellaneous	1,000	0.03
Total	3,383,858	

It is not surprising that salaries and benefits comprise the greatest percentage of the budget at a combined 58.06%. That percentage is a little on the high side of the typical average, but is about right considering that the district has an in-house maintenance and grounds department. The district supplies and materials budget is very close to the regional average on a per square foot basis:

■ Shorewood: \$0.23/sq. ft.

Regional Avg: \$0.25/sq. ft.

However, once again, Shorewood doesn't compare as well on a per student average:

■ Shorewood: \$68.56/student

Regional Avg. \$34.23/student

Fewer and fewer districts have been able to maintain a major maintenance budget because of revenue caps. This has lead to a number of building related problems and/or building related referenda across the state and country. Shorewood has a \$120,000 annual major maintenance budget in its general fund. This equates to about \$0.204/sq. ft. Ideally organizations invest approximately \$1.00/sq. ft. annually on major maintenance; however, over time \$0.67/sq. ft. has become an acceptable standard. Shorewood has been able to supplement their general fund with referendum dollars and currently has approximately \$1,750,000 available for projects in the 49 fund.

A comparison with the Whitefish Bay School District facilities budget was also performed. In this comparison, we only evaluated discretionary budgets and excluded salaries, benefits, and utilities since they were compared in other sections of this report. The table below summarizes this comparison which is detailed in Attachment 8.

Budget Comparison With Whitefish Bay							
	Shorewood	Whitefish Bay					
Contracted Services	\$418,501	\$315,885					
Major Maintenance	\$120,000	\$0					
Supplies/Materials	\$137,812	\$184,550					
Equipment	\$94,000	\$66,850					
Other	\$1,000	\$2,025					
Total	\$771,313	\$569,310					

Shorewood is in an enviable position as compared to Whitefish Bay having \$202,003 more money in its discretionary facilities budget. These numbers on a per square foot and per student basis are:

- Shorewood:
  - o \$1.31/sq. ft.
  - o \$383.74/student
- Whitefish Bay:
  - o \$0.93/sq. ft.
  - o \$191.56/student

## 8.0 Utility Usage Evaluation:

There are several ways to evaluate utility usage and expenditures. No matter how utilities are evaluated, the larger the evaluation window used, the more valuable and accurate the evaluation will be. In this evaluation, we looked at a 12-month window from March of 2005 through February of 2006. In a couple of instances billing data was missing; however, in all cases the subsequent month's bill was available which contained some information from the previous month. The table below is an overall summary of the energy usage and costs for the 12-month window. Note that some of the small, non-building related bills such as tennis courts and baseball field lighting were not included in the totals.

12 Month Utility Summary								
School	Electricity (kWH)	Electricity (Dollars)	Gas (Therms)	Gas (Dollars)				
Atwater	656,286	\$57,973.98	44,517	\$53,102.43				
Lake Bluff	520,440	\$47,039.67	58,345	\$64,651.14				
SIS	729,000	\$65,904.37	18,241	\$19,945.03				
SHS	1,545,096	\$139,432.88	243,362	\$296,235.76				
Total	3,450,832	\$310,350.90	364,465	\$433,934.36				

The most common way to evaluate energy usage is to evaluate it on a per square foot basis. Gas usage is typically measured in therms and electricity usage is measured in Kilowatt-Hours. In order to see the full energy usage picture, both gas and electricity usage can be converted to a common measuring unit called kBTU or kilo British Thermal Units and then they can be added together. The table below is a summary of the electricity, gas, and total energy usage on a per square foot basis.

Utility Evaluation									
	Electricity			Gas			Total		
School	kWH/ SF	\$/SF	kBTU /SF	Therms/ SF	\$/SF	kBTU /SF	kBTU/ SF	\$/SF	
Atwater	5.18	\$0.457	17.68	0.351	\$0.419	35,1	52.78	\$0.876	
Lake Bluff	4.73	\$0.428	16.14	0.531	\$0.589	53.1	69.24	\$1.017	
SIS	8.26	\$0.747	28.19	0.207	\$0.226	20.7	48.89	\$0.973	
SHS	5.86	\$0.529	20.00	0.923	\$1.123	92.3	112.30	\$1.652	
Total	5.86	\$0.527	20.00	0.617	\$0.737	61.9	81.90	\$1.264	

In January of 2006, Wisconsin Focus on Energy reported out on a detailed energy benchmarking survey performed for over 800 K-12 schools in the State of Wisconsin representing over 150 school districts. That survey provided a series of benchmarks that schools and districts can compare themselves to. Focus on Energy is still accepting data from school districts, and it is highly recommended that the Shorewood School District take advantage of this free evaluation tool. The data provided for each building by Focus on Energy evaluates and compares the building energy usage to other similar schools based on factors such as type of school, age of school, what percentage of the building is air conditioned, whether the school has a pool or not, etc. The simple comparisons that can be made without the District participating in the survey are against the State averages which are:

Electricity Usage: 6.00 kWH/SF
Gas Usage (w/o pool): 49.60 kBTU/SF
Gas Usage (w/pool): 59.10 kBTU/SF
Total Energy (w/o pool): 70.70 kBTU/SF
Total Energy (w/ pool): 83.80 kBTU/SF

Using the data from the table on the previous page, Atwater, Lake Bluff, and SIS compare very well against the State averages while Shorewood High School does not. The same is true with respect to costs where the three schools compare fairly well against the State average of \$0.90/SF, while the high school does not compare as well against other high schools with pools which average \$0.94/SF. One of the big reasons for the high school not comparing well, is because it is spread over several buildings and has a great deal more exterior envelop than a typical high school comprised of one very large building.

#### 10.0 Conclusions and Recommendations

Earlier in this report, we used the word inconsistent to describe the condition of the facilities in the Shorewood School District. Inconsistent is also a good description of the overall facilities operations of the District. By not having either a full-time Business Manager or a management position in the facilities department, a great deal of the facilities management falls on to the Superintendent. This probably had some benefits to both the Superintendent and to the District when Dr. McCann first started as it gave him the opportunity to understand the inner workings of the department, something that many Superintendents never quite grasp. It will be important as the District hires a Business Manager to determine what role in facilities that the Superintendent and the Business Manager will have. It will also be an important time to determine whether the District is getting good value from the stipend it is paying the Working Foreman and whether that position should continue to remain in the union or become a part of management. There has been some evidence the Superintendent and the Working Foreman are making some progress on departmental issues, but there is still a long way to go before the department reaches its potential.

The potential for the facilities department is great for several reasons starting with a strong commitment from its Superintendent. The department has a fairly large staff and an adequate budget especially as it compares to the Whitefish Bay School District. What the department needs is greater planning and greater accountability of the staff for their actions. In the past there have been members of the department who have been either poor performers or had poor attendance. These situations must be corrected by management through progressive discipline as they occur. If the department members do not value their positions enough to work hard or even to show up to work, then it will be hard for others to value the department as well.

We have the following recommendations for the District in regards to the facilities department (note that these recommendations are not listed in order of importance):

- The District should evaluate how it uses the space available in the four schools. The capacity of the schools is quite a bit greater than the enrollment and this has a negative impact to facilities-related costs as highlighted in several areas of this report. Examples of what could be considered as excess space include having two fitness centers within walking distance of each other, two pools on one campus, and having many spaces that are not used the majority of the school day.
- There needs to be greater feedback and accountability related to custodial care of the buildings. Head Custodians need to be inspecting random areas of their schools on a daily basis and working with the appropriate custodian to correct problems as they occur. The Working Foreman needs to audit the checks made by the Head Custodians with random checks of his own. The principals also need to take some responsibility related to the custodial care of the schools by ensuring that rooms are left in a state that will allow them to be cleaned properly at the end of each school day, and by providing feedback to their Head Custodians and the Working Foreman.
- The District should consider performing a detailed staffing evaluation to assess

each individual's responsibilities and determine proper workloads for each employee. These types of evaluations typically identify that there are unbalanced work loads amongst custodians and also can identify efficiencies that may allow staff members to be reassigned to other tasks.

- The Working Foreman needs to play a greater role in the facilities related budget, both on the front-end as part of the budgeting process, and by performing monthly reviews of the budget versus actuals.
- The District should look into ways to reduce the cost of custodial related supplies through contracting arrangements including involvement in purchasing consortiums.
- The District should participate in the Wisconsin Focus on Energy utility benchmarking survey. The survey and associated feedback are free and can be very informative.
- The changes in the performance appraisal forms and process summarized earlier in this report should be made.
- The District should enroll the Working Foreman in the Wisconsin Association of School Business Officials Facilities Manager Certification Program. This program provides an excellent foundation for a person managing a facilities department in a K-12 school district.
- A district-wide survey of facilities support should be performed asking for input on the quality of service related to cleaning, maintenance, etc.

Like most organizations, there is room for improvement in the facilities operations of the Shorewood School District. This assessment provides an outside perspective on what some of those areas of improvement are. The next step is for the District to identify what it expects from its facilities organization and to take the necessary steps to meet that expectation.