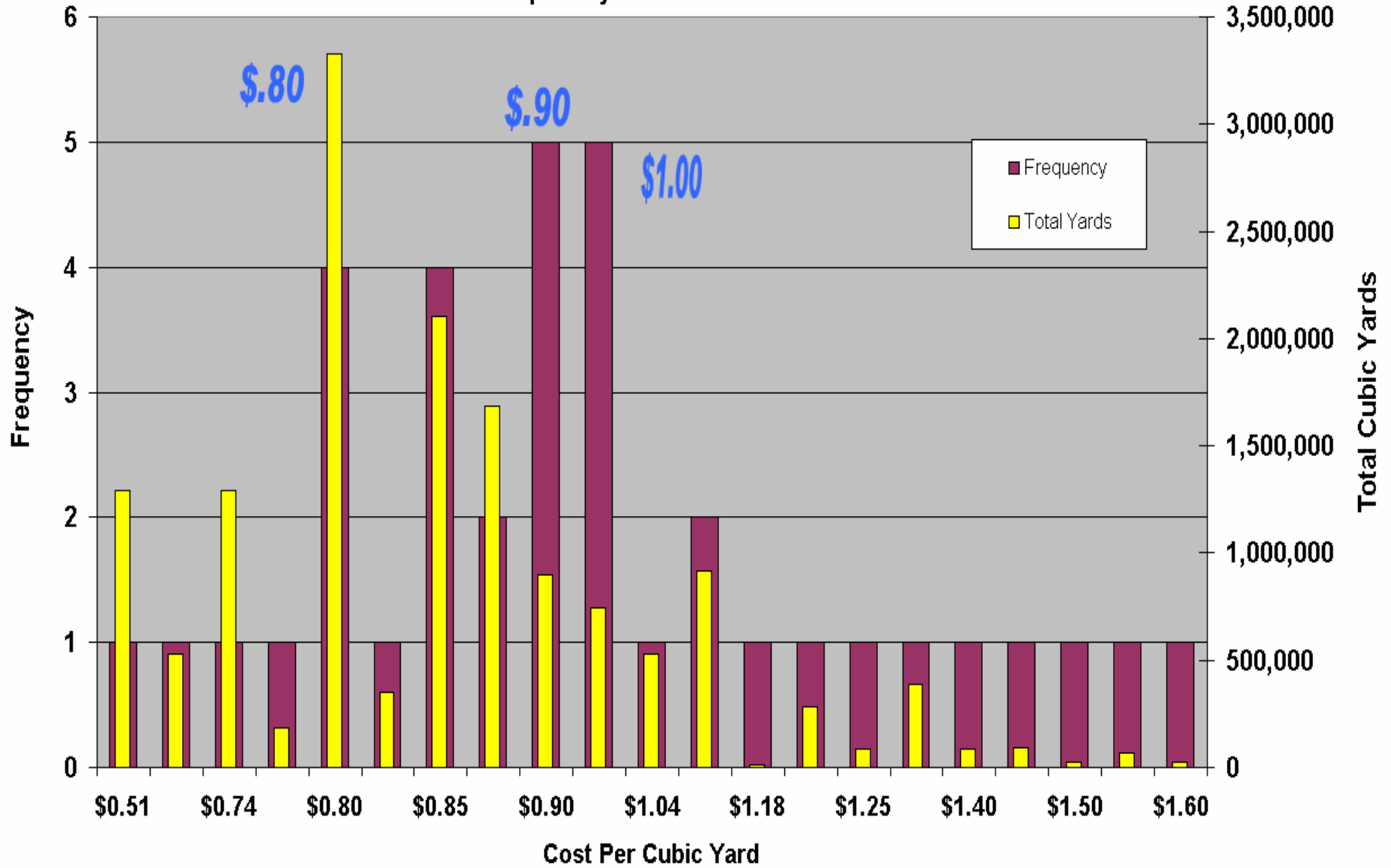


## 2009 AML Reclamation Grading Costs - 3 Lowest Project Bids

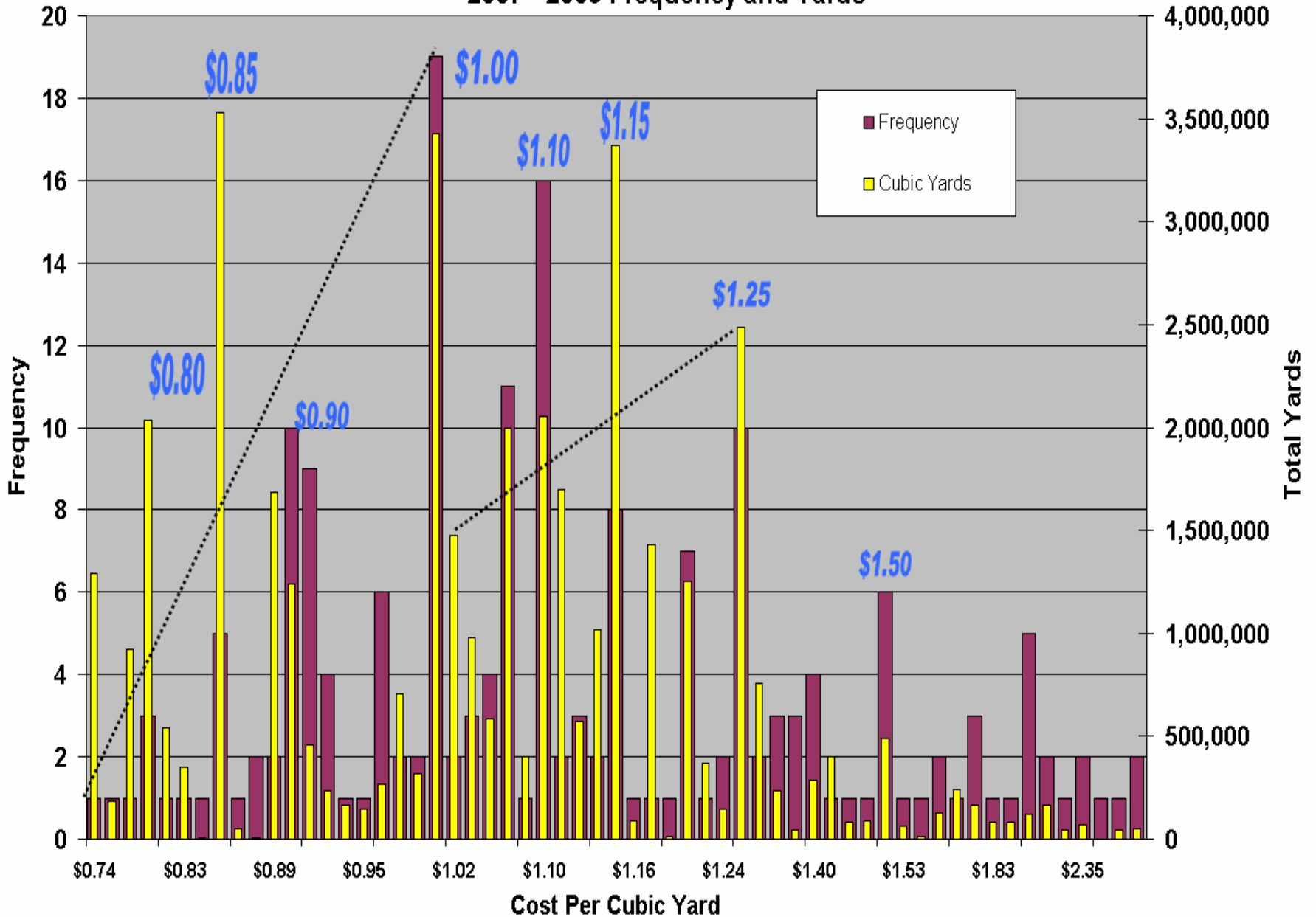
Ave Grading  
Costs/CY      Ave Grading Cost  
for All Projects

	DESCRIPTION	QUANTITIES	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL		
Reclamation Project	Task	Cubic Yards	Cost per CY	Low Project Bid	Cost per CY	2nd Project Bid	Cost per CY	3rd Project Bid		
OSM 11(0838)101.1	Grading	88,300	\$0.90	\$79,470.00	\$1.40	\$123,620.00	\$1.25	\$110,375.00		
OSM 24(0504)101.1	Grading	506,239	\$0.89	\$450,552.71	\$0.80	\$404,991.20	\$0.90	\$455,615.10		
OSM 37(4481)101.1	Grading	26,000	\$0.90	\$23,400.00	\$1.60	\$41,600.00	\$1.50	\$39,000.00		
OSM 17(6801)101.1	Grading									
	a) Area "A"	349,000	\$0.85	\$296,650.00	\$0.80	\$279,200.00	\$0.83	\$289,670.00		
	b) Area "B"	1,182,000	\$0.85	\$1,004,700.00	\$0.80	\$945,600.00	\$0.89	\$1,051,980.00		
OSM 10(4330)101.1	Grading	91,500	\$1.49	\$136,335.00	\$0.90	\$82,350.00	\$1.00	\$91,500.00		
OSM 16(0986)101.1	Grading	185,000	\$0.76	\$140,600.00	\$0.85	\$157,250.00	\$0.90	\$166,500.00		
OSM 16(6204)201.1	Grading	1,290,000	\$0.51	\$657,900.00	\$0.74	\$954,600.00	\$0.80	\$1,032,000.00		
OSM 43(0116)101.1	Grading									
	a) Area "A"	15,000	\$1.00	\$15,000.00	\$3.00	\$45,000.00	\$1.18	\$17,700.00		
	b) Area "B"	65,000	\$1.00	\$65,000.00	\$2.00	\$130,000.00	\$1.53	\$99,450.00		
	c) Area "C"	285,000	\$1.00	\$285,000.00	\$1.00	\$285,000.00	\$1.24	\$353,400.00		
OSM 35(3738)102.1	Grading									
	A) Borrow Area	526,965	\$1.04	\$548,043.60	\$1.15	\$606,009.75	\$0.73	\$384,684.45		
	B) Grading Area	387,635	\$0.85	\$329,489.75	\$1.15	\$445,780.25	\$1.28	\$496,172.80		
9										
		<b>4,997,639</b>	<b>0.81</b>	\$4,032,141.06	<b>\$0.90</b>	\$4,501,001.20	<b>\$0.92</b>	\$4,588,047.35	<b>\$0.88</b>	\$4,373,729.87

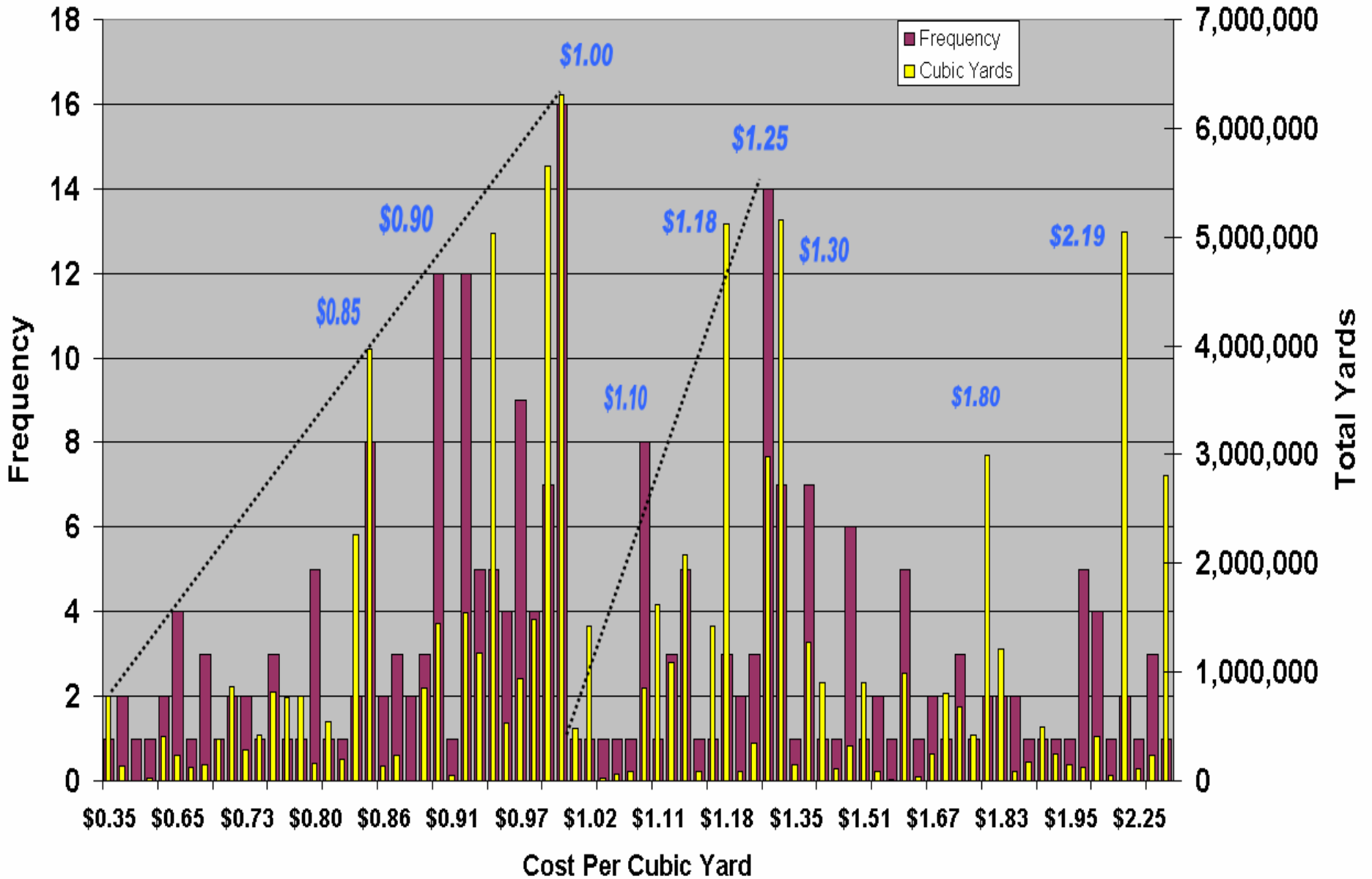
# 2009 Frequency and Yards



### 2007 - 2009 Frequency and Yards



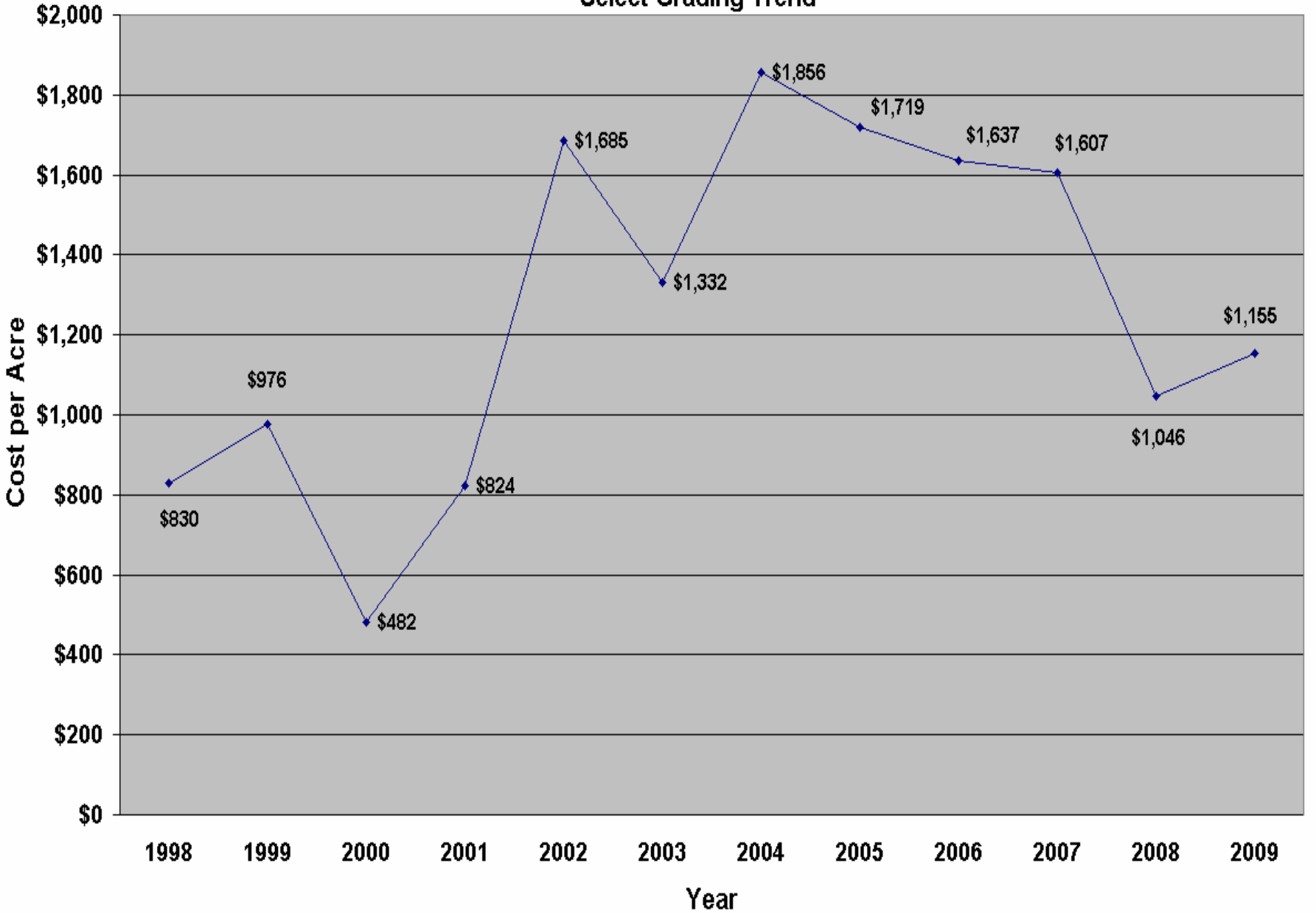
### 2005 - 2007 Frequency and Yards



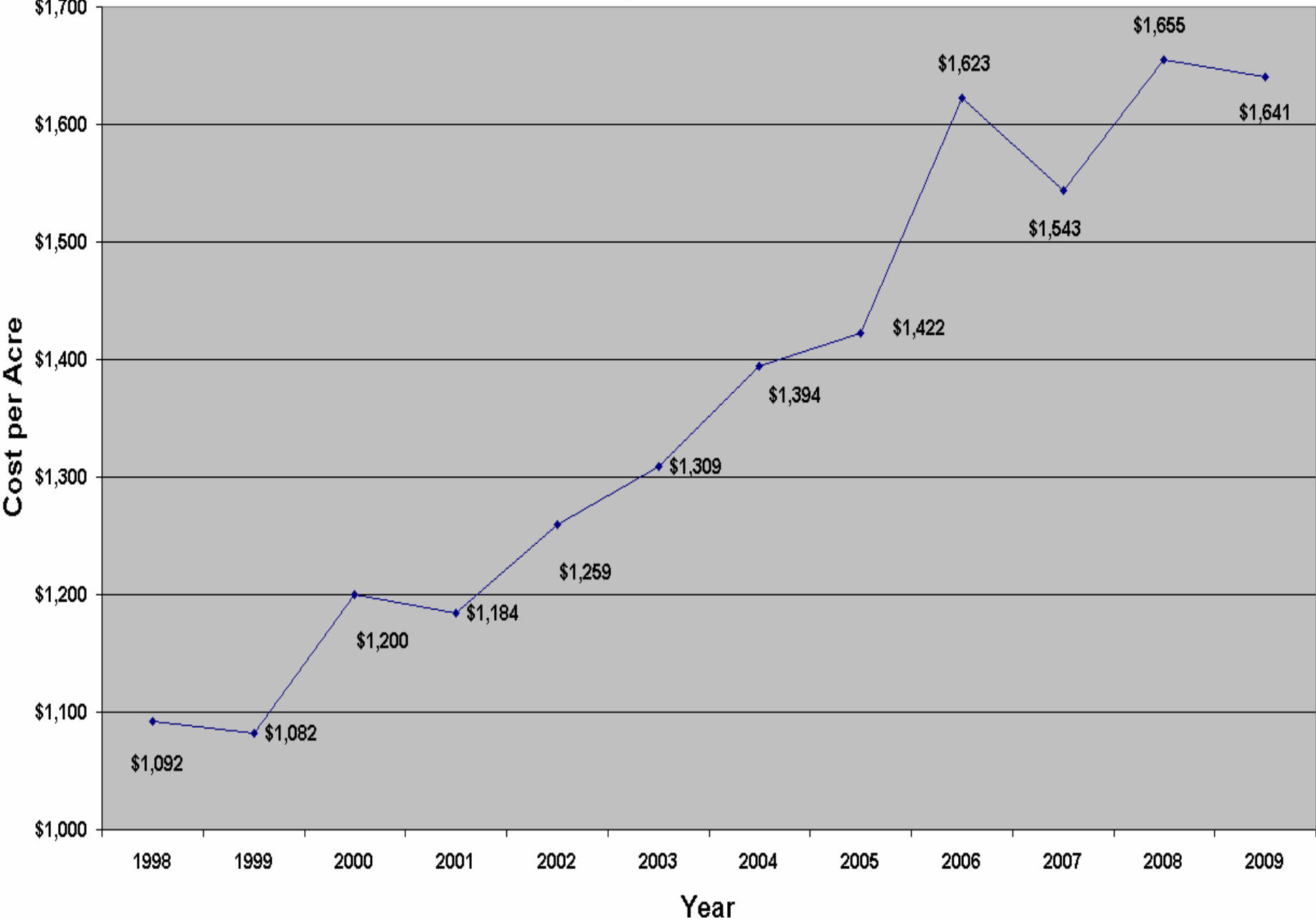
**Total Grading Costs for 2007 - 2009**

<b>Unit Cost</b>	<b>2007 Total Yards</b>	<b>2007 Freq</b>	<b>2008 Total yards</b>	<b>2008 Freq</b>	<b>2009 Total Yards</b>	<b>2009 Freq</b>	<b>Combined Total Yards</b>	<b>Combined Freq</b>				
\$0.51					1,290,000	1	1,290,000	1	\$657,900			
\$0.73					526,965	1	526,965	1	\$384,684			
\$0.74					1,290,000	1	1,290,000	1	\$954,600			
\$0.76					185,000	1	185,000	1	\$140,600			
\$0.77			924,000	1			924,000	1	\$711,480			
\$0.80					2,037,239	3	2,037,239	3	\$1,629,791			
\$0.81	538,800	1					538,800	1	\$436,428			
\$0.83					349,000	1	349,000	1	\$289,670			
\$0.84			8,350	1			8,350	1	\$7,014			
\$0.85	1,427,670	1			2,103,635	4	3,531,305	5	\$2,998,078			
\$0.86	53,227	1					53,227	1	\$45,775			
\$0.88	4,300	2					4,300	2	\$3,784			
\$0.89					1,688,239	2	1,688,239	2	\$1,502,533			
\$0.90	335,411	4	8,350	1	897,039	5	1,240,800	10	\$1,115,479			
\$0.92	409,289	8	48,750	1			458,039	9	\$421,396			
\$0.93	149,000	2	87,750	2			236,750	4	\$220,651			
\$0.94	165,790	1					165,790	1	\$155,843			
\$0.95	149,300	1					149,300	1	\$141,835			
\$0.97	269,809	6					269,809	6	\$261,715			
\$0.98	704,590	2					704,590	2	\$690,498			
\$0.99	315,090	2					315,090	2	\$311,939			
\$1.00	843,251	4	1,843,741	10	741,500	5	3,428,492	19	\$3,428,492	19,395,085	\$0.85	
\$1.02	1,427,670	1	45,670	1			1,473,340	2	\$1,502,807			
\$1.03			982,201	3			982,201	3	\$1,011,667			
\$1.04	22,000	1	34,980	2	526,965	1	583,945	4	\$607,303			
\$1.05	66,000	1	1,928,492	10			1,994,492	11	\$2,094,217			
\$1.06			400,517	1			400,517	1	\$424,548			
\$1.10	40,989	2	2,014,112	14			2,055,101	16	\$2,260,611			
\$1.11	1,617,850	1	81,000	1			1,698,850	2	\$1,885,724			
\$1.13			575,080	3			575,080	3	\$649,840			
\$1.14			1,016,500	2			1,016,500	2	\$1,158,810			
\$1.15	1,738,893	3	718,800	3	914,600	2	3,372,293	8	\$3,878,137			
\$1.16	86,253	1					86,253	1	\$100,053			
\$1.17	1,427,670	1					1,427,670	1	\$1,670,374			
\$1.18							15,000	1	\$17,700			
\$1.20	61,165	1	1,193,300	6			1,254,465	7	\$1,505,358			
\$1.22			367,000	1			367,000	1	\$447,740			
\$1.24	143,427	2					143,427	2	\$177,849			
\$1.25	2,000,601	8	400,517	1	88,300	1	2,489,418	10	\$3,111,773	19,935,552	\$1.13	

### Select Grading Trend



# Revegetation Trend







Unit Operation	Unit Measure	Unit Costs (\$)
Mobilization/demobilization	Job	4% of direct costs or \$40,000, whichever is less
Grading (< 500-foot push)	cubic yard	<b>0.85</b> (0.95)
Grading (≥500-foot push/haul)	cubic yard	<b>1.10</b> (1.20)
Selective Grading	Acre	<b>1,150.00</b> (1,250.00)
Revegetation	Acre	<b>1,615.00</b> (1,600.00)
Tree Planting	Tree	<b>0.15</b>
Ditch Excavation	cubic yard	<b>4.55</b> (5.25)
Jute Matting	square yard	<b>3.30</b> (3.25)
High Velocity Erosion Control	square yard	<b>3.00</b> (3.50)
R3 Rock Lining	square yard	<b>26.00</b> (25.00)
R4 Rock Lining	square yard	<b>20.00</b> (22.00)
R5 Rock Lining	square yard	<b>19.00</b> (21.00)
Geotextile/Filter Fabric	square yard	<b>1.70</b> (2.00)
PVC Lining <sup>1</sup>	square yard	<b>12.00</b> (11.00)
Subsurface Drain	lineal foot	<b>17.00</b> (18.50)
Erosion and Sedimentation Control (Temporary Installation)	Job	Lump sum (5% of direct costs for site)
Pond Removal Active Phase <sup>2</sup>	Pond	<b>3,800.00</b>
Erosion and Sedimentation Control (Temporary Installation)	Job	Lump sum (5% of direct costs for site)
Stage 3 Maintenance Bond Non-Cropland Areas (Land uses where crop yields are not required)	Acre	<b>100.00</b>
Stage 3 Maintenance Bond Cropland (not row crops) Pastureland or Land occasional cut for hay (excludes seed cost)	Acre	<b>600</b> (550.00)
Stage 3 Maintenance Bond Cropland Area-Row Crops (includes seed cost)	Acre	<b>800</b> (800.00)
Stage 3 Mobilization	Job	<b>2,500.00</b>
Pond Removal-Stage 3	Cubic yards (Embankment volume) Plus Topsoiling & Revegetation Cost	Use <500 grading for pond embankment volume plus Topsoiling & Revegetation cost for the area disturbed
Ditch Removal-Stage 3	Lineal Foot	<b>0.65</b>
Equipment Tire Removal and Disposal	Tire	<b>300.00</b>

Structure Demolition	Costs will be calculated using costs listed in the construction industry's latest annual cost publications, such as <i>Means Building Construction Cost Data</i> .	
Mine Sealing <sup>3</sup> Non-hydraulic shaft seal – inert fill	shaft (10 ft. or less diameter)	1,400.00
	shaft (11 to 15 ft. diameter)	3,000.00
	shaft (16 to 20 ft. diameter)	4,500.00
	shaft (21 to 25 ft. diameter)	8,000.00
Mine Sealing <sup>3</sup> Hydraulic shaft seal w/ bulkhead	shaft (10 ft. or less diameter)	7,600.00
	shaft (11 to 15 ft. diameter)	9,200.00
	shaft (16 to 20 ft. diameter)	10,700.00
	shaft (21 to 25 ft. diameter)	14,200.00
Mine Sealing <sup>3</sup> Non-hydraulic drift / slope seal	drift / slope	3,900.00
Mine Sealing <sup>3</sup> Hydraulic drift / slope seal w/ bulkhead	drift / slope	6,200.00