

1.5. Project Cost Evaluation

1.5.1. Construction Costs

Projected Building Cost \cong \$22,000,000 Cost / SF \cong \$46.32

* excludes mechanization equipment, distribution equipment, land costs, sitework, permitting, etc.*

* Actual Building Cost does not represent the actual building cost for this project *

1.5.2. Total Project Costs

Total Project Cost \cong \$32,000,000 Cost / SF \cong \$67.36

* excludes mechanization and distribution equipment*

1.5.3. Building System Costs

Building systems costs are confidential as per Gilbane Building Company's request.

1.5.4. Parametric Estimate

	<i>CSI Division</i>	<i>%</i>	<i>Sq. Ft. Cost</i>	<i>Projected Cost</i>
00	Bidding Requirements	0.00	0	0
01	General Requirements	8.07	4.05	1,923,918
02	Site Work	0.00	0	0
03	Concrete	13.41	6.73	3,195,536
04	Masonry	1.45	0.73	345,264
05	Metals	15.16	7.61	3,613,092
06	Wood & Plastics	0.14	0.07	33,524
07	Thermal & Moisture Protection	4.35	2.18	1,037,250
08	Doors & Windows	2.40	1.2	572,059
09	Finishes	9.06	4.55	2,160,128
10	Specialties	0.99	0.49	234,922
11	Equipment	0.97	0.49	230,676
12	Furnishings	0.16	0.81	40,213
13	Special Construction	0.00	0	0
14	Conveying Systems	0.00	0	0
15	Mechanical	16.59	8.33	3,955,324
16	Electrical	11.25	5.65	2,682,385
D4 Total Building Costs		84.00	\$42.24	\$20,062,351

1.5.5. Design Costs

Due to the nature of the project, design costs are not able to be determined. Typically the design cost is approximately 8% of the total project cost.

Total Project Cost \cong \$32,000,000 Design Cost \cong \$2,560,000

* Design Cost shown above does not represent the actual design cost for this project *

1.5.6. Square Foot Estimate Using R.S. Means

Reference: R.S. Means Construction Cost Data (2004), 62nd Annual Edition

- Assumptions:
1. Building Type: Warehouse and Office combination
 2. Median unit cost data was used: \$47.00/sf
 3. Size Modifier: 15.00 \therefore Cost Multiplier = 0.90
 4. Location Adjustment = 0.881 (weighted average)
 5. No adjustment was taken for time

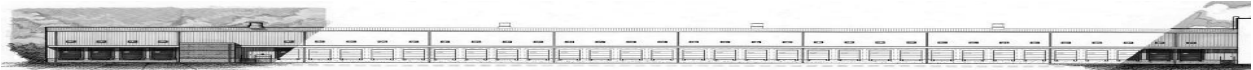
Calculation:

Building Size		475,000 sf			
Cost per Square Foot	x	\$ 47.00 /sf			
Unadjusted Total		\$22,325,000			
Location Adjustment	-	\$2,232,500			
Size Adjustment	-	\$2,656,675			
R.S. Means Total		\$17,435,825			

1.5.7. Estimate Comparison

	Sq. Ft. Cost	Projected Cost	Variation From Projected	Deviation
D4 Cost Estimate	\$42.24	\$20,062,351	\$1,937,649	8.81%
R.S. Means Estimate	\$36.71	\$17,435,825	\$4,564,175	20.75%
Projected Building Cost	\$46.32	\$22,000,000		

Several estimates of the FedEx Ground Distribution Hub were compiled using various available resources which include: D4 Cost estimating software and R.S. Means Construction Cost Data. Differences in the building cost estimates can be significantly affected by many factors such as environmental conditions, economic factors and owner specified constraints.



D4 Cost estimating software used the smart average of three warehouse and distribution projects. These projects were chosen for their simplicity in structure, electrical and mechanical systems. The estimated square footage was adjusted to 475,000 resulting in an approximate project cost of \$20,062,351. This estimated cost was within approximately 9 % of the projected building cost. The difference between costs cannot be attributed to sitework because sitework was taken out of the D4 estimate. This difference could be a resultant of economic conditions such as the current increase in steel and concrete costs. Also, this project is fast-tracked and the structure is to be turned over to the owner within 12 months. Fast-tracking a project such as this can attribute to the increased projected building cost.

R.S. Means Construction Cost Data for 2004 was used to perform another estimate which yielded a deviation of over 20 %. This method of estimating a project is only applicable for the building itself. Specialty systems within the building such as redundant electrical systems and fiber optic data communication systems are not included. Also, economic factors and owner constraints are not accountable. The same factors that affected the D4 estimate are also viable reasons for the difference between the R.S. Means value and the actual projected cost.