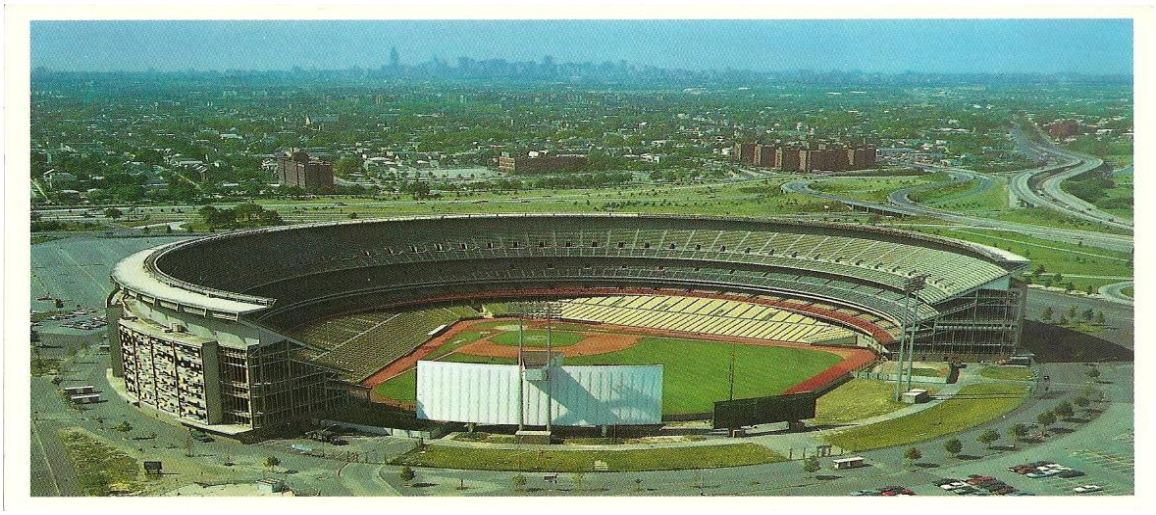
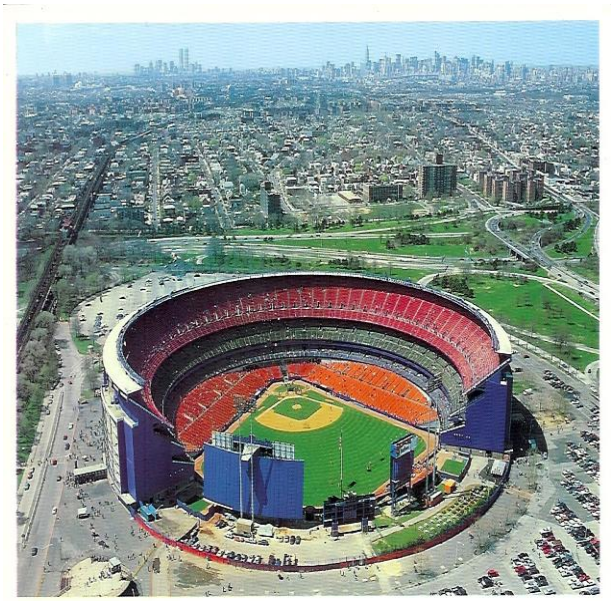
SHEA STADIUM RENOVATION PROJECT OVERVIEW



Exercise PM tools in planning and execution management

- WBS
- Schedule
- Budget
- Risk/Opportunity Analysis
- EVM (progress assessment, projection of future)

SCENARIO

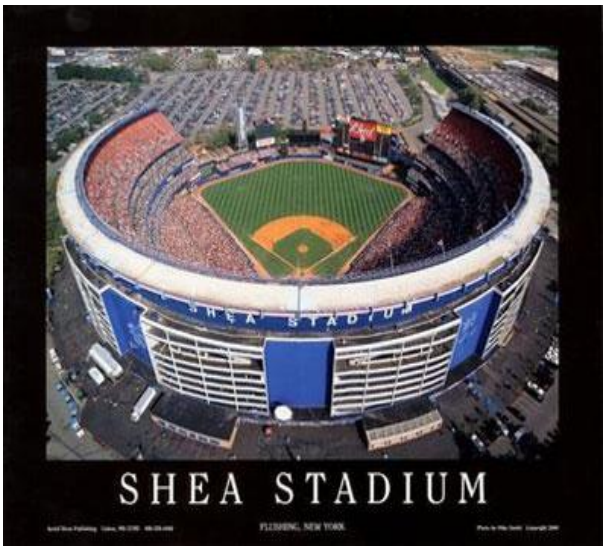


-CAPACITY:55,601

-SURFACE:GRASS

-OPENED-APRIL 17,1964

-COST:$28.5 MILLION



Shea Stadium Renovation Project Overview

- Scope: Renovate playing field (drainage, sod etc.) and stadium structure (supports, roof, boxes, dressing rooms, scoreboard, lights etc.)
- Project start date: 1/14/2004 (a Wednesday)
- Must be complete in 15 months
- Contract value: $350M
- Profit $20M (assume built into the $350M, including the early completion incentive)
- Financial Risk: Penalty $250K/Calendar day for each day beyond 3/31/2005
- Opportunity: Early completion bonus $100K/workday for each day project is completed before 3/31/2005
- 5 day work weeks
- Identified Project Risks:
    - Union strike probability of 50%, start date 10/30/2004, strike duration 4 weeks

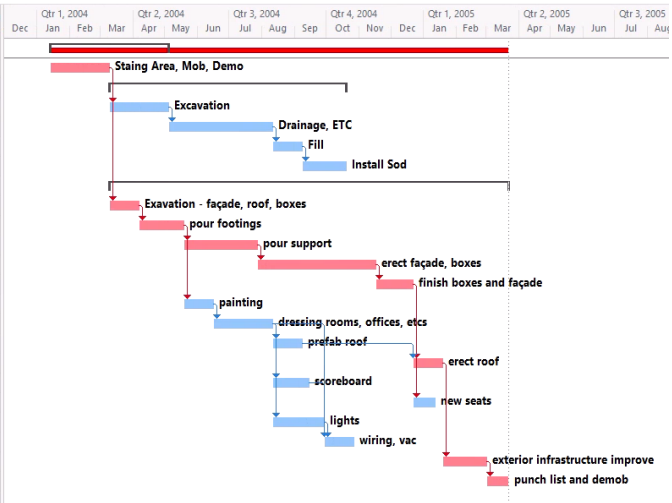
- Weather (cold, wet) impact to playing field – timeframe – May 2004, approx 2 weeks

Shea Stadium Renovation Project OverviewHomework Deliverables

- Part I
  - One page executive summary of project plan
    - WBS with task numbering, indentation and correct form
    - Gantt chart of plan in Microsoft Project (same view as the WBS)
    - Highlight the critical path
    - Hint: All three above are a single MS Project View
- Part II
  - Two page Risk analysis report
    - impact of 4 week union strike
    - impact of 2 week weather impact
- Part III
  - Two page executive summary of status of the project as of 12/10/04
    - Earned value analysis: BCWS, ACWP, BCWP, SPI, CPI, EAC
    - Project ahead of/behind schedule; budget underspent/overspent
    - Projected EAC, Completion Date, Updated critical path
    - Suggested action to take

WBS with Tasks and Critical Path Highlighted on Gantt Chart

	Task Mode	WBS	Task Name	Duration	Start	Finish	Predecessors	Resource Names
1		1	**Stadium Contruction Project**	**80 days?**	**Wed 1/14/04**	**Tue 5/4/04**		
2		1.1	Staing Area, Mob, Demo	8 wks	Wed 1/14/04	Tue 3/9/04		
3		1.2	**Playing Field**	**160 days**	**Wed 3/10/04**	**Tue 10/19/04**		
4		1.2.1	Excavation	8 wks	Wed 3/10/04	Tue 5/4/04	2	
5		1.2.2	Drainage, ETC	14 wks	Wed 5/5/04	Tue 8/10/04	4	
6		1.2.3	Fill	4 wks	Wed 8/11/04	Tue 9/7/04	5	
7		1.2.4	Install Sod	6 wks	Wed 9/8/04	Tue 10/19/04	6	
8		1.3	**Stadium Structure**	**270 days**	**Wed 3/10/04**	**Tue 3/22/05**		
9		1.3.1	Exavation - façade, roof, boxes	4 wks	Wed 3/10/04	Tue 4/6/04	2	
10		1.3.2	pour footings	6 wks	Wed 4/7/04	Tue 5/18/04	9	
11		1.3.3	pour support	10 wks	Wed 5/19/04	Tue 7/27/04	10	
12		1.3.4	erect façade, boxes	16 wks	Wed 7/28/04	Tue 11/16/04	11	
13		1.3.5	finish boxes and façade	5 wks	Wed 11/17/04	Tue 12/21/04	12	
14		1.3.6	painting	4 wks	Wed 5/19/04	Tue 6/15/04	10	
15		1.3.7	dressing rooms, offices, etcs	8 wks	Wed 6/16/04	Tue 8/10/04	14	
16		1.3.8	prefab roof	4 wks	Wed 8/11/04	Tue 9/7/04	15	
17		1.3.9	erect roof	4 wks	Wed 12/22/04	Tue 1/18/05	13,16	
18		1.3.1	scoreboard	5 wks	Wed 8/11/04	Tue 9/14/04	15	
19		1.3.1	new seats	3 wks	Wed 12/22/04	Tue 1/11/05	13	
20		1.3.1	lights	7 wks	Wed 8/11/04	Tue 9/28/04	15	
21		1.3.1	wiring, vac	4 wks	Wed 9/29/04	Tue 10/26/04	15,16,18,20	
22		1.3.1	exterior infrastructure improve	6 wks	Wed 1/19/05	Tue 3/1/05	17	
23		1.3.1	punch list and demob	3 wks	Wed 3/2/05	Tue 3/22/05	22	



Shea Stadium Renovation Project Overview Risks and analysis

- Risk 1: 4 Week Union Strike
  - Time: 10/30/04 to 11/30/04.
  - Probability: 50%.
  - Impact Schedule:
    - Stadium Structure, Erect Facade, Boxes and finish boxes & Facade will be impacted and these are on the critical path.
  - Impact Cost:
    - A 4 week delay to finish boxes and façade would shift the remainder of the project cost day for day, 4 additional weeks.
      - $250k/day * 12days = $3000k
    - Its adjusted at 50% probability

      $3M * 0.5 = $1.5M loss of profit

- Mitigation strategy
  - Hire subcontractors.
  - Compress the façade and boxes installation so it finishes prior to strike as this is on the direct critical path.
  - Allow for erecting roof out of sequence to start earlier.
  - Mitigation Cost Impact:
    - Hiring additional sub contractors to work on seats doesn't save any schedule, and will only cost more for project
    - Compressing the façade boxes installation so it finishes earlier can save money on a day for day basis.
    - Allowing for erecting roof out of sequence, and hire subcontractors to start that work can reduce the total work duration and allow for a 4 week negotiation with union without a slip to the schedule.

Shea Stadium Renovation Project Overview Risks andAnalysis

- Risk 2: 2 Week Weather
- Time: May 2004
- Probability: 100%
- Impact:
  - Schedule:
    - Playing Field Excavation
    - Playing Field Drainage, ETC

- Cost:
  - N/A

Mitigation strategy:
The excavation, drainage, ETC will be delayed if there is a 2 week weather impact,however because these two activities are not in the critical path.

Schedule Impact detail:
Compress the facade and boxes installation so it finishes prior to strike as this is on the direct critical path.

Shea Stadium Renovation Project Overview

Part III ($350M-$20M)/15 month = $22M

Two page executive summary of status of the project as of 12/10/04

- 1/14/2004 to 12/10/2004 (~11 months)
- BCWS: % Complete (planned) * Budget 11month/15month* $330M = $242M
- ACWP: Assuming $250M
- BCWP: % Complete (actual) * Budget = 75% * $330M =$247.5M
- SPI: EV / PV = $247.5M/$242M = 1.023
- CPI: EV / AC = $247.5/$250M = 0.99
- EAC: BAC / CPI = $330 / 0.99 = ~$333.33M

Using the assumption that the project runs like LOE:

- The project is ahead of schedule.
- Ever so slightly over budget / overspent.
- Estimate at complete for cost will be over budget.

Shea Stadium Renovation Project Overview

Using the assumption that the project runs like LOE:

- Project had been experienced updated critical path due to 2 weeks of May month Weather impact.
- This has made the playing field excavation as the critical path.

Project still on the track to finish on time

Task Mode	WBS	Task Name	Duration	Start	Finish	Predecessors
	1	**Stadium Contruction Project**	**310 days**	**Wed 1/14/04**	**Tue 3/22/05**	
	1.1	Staing Area, Mob, Demo	8 wks	Wed 1/14/04	Tue 3/9/04	
	1.2	**Playing Field**	**279 days**	**Wed 3/10/04**	**Mon 4/4/05**	
	1.2.1	Excavation	10 wks	Wed 3/10/04	Tue 5/18/04	2
	1.2.2	Drainage, ETC	14 wks	Wed 5/19/04	Tue 8/24/04	4
	1.2.3	Fill	5 wks	Wed 8/25/04	Mon 4/4/05	5
	1.2.4	Install Sod	6 wks	Wed 8/25/04	Tue 10/5/04	5
	1.3	**Stadium structure**	**270 days**	**Wed 3/10/04**	**Tue 3/22/05**	
	1.3.1	Excavation - façade, roof, boxes	4 wks	Wed 3/10/04	Tue 4/6/04	2
	1.3.2	pour footings	6 wks	Wed 4/7/04	Tue 5/18/04	9
	1.3.3	pour support	10 wks	Wed 5/19/04	Tue 7/27/04	10
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	1.3.6	painting	4 wks	Wed 5/19/04	Tue 6/15/04	10
	1.3.7	dressing rooms, offices etc	8 wks	Wed 6/16/04	Tue 8/10/04	14
	1.3.8	prefeb roof	4 wks	Wed 8/11/04	Tue 9/7/04	15
	1.3.9	erect roof	4 wks	Wed 12/22/04	Tue 1/18/05	13,16
	1.3.10	score board	5 wks	Wed 8/11/04	Tue 9/14/04	15
	1.3.11	new seats	3 wks	Wed 12/22/04	Tue 1/11/05	13
	1.3.12	lights	7 wks	Wed 8/11/04	Tue 9/28/04	15
	1.3.13	wiring, vac	4 wks	Wed 9/29/04	Tue 10/26/04	15,16,18,20
	1.3.14	exterior infrastructure improve	6 wks	Wed 1/19/05	Tue 3/1/05	17
	1.3.15	punch list and demob	3 wks	Wed 3/2/05	Tue 3/22/05	22