MEMO

To:	Daniel J. Ulatowski, AICP
CC:	Leanne Voit (Wendel)
From:	Christopher Chapman, PE, LEED AP
Date:	June 28, 2024
RE:	Lou Gehrig Sports Complex Improvements – Request for Parking Analysis

The purpose of this technical memo is to provide a Parking Demand Assessment related to the proposed improvements at Lou Gehrig Sports complex located at 50 Dann Road. When evaluating the parking supply needs for the project, our firm projected the parking demand using nationally accepted methodology developed by the Institute of Transportation Engineers (ITE) for similar uses. The following tasks were undertaken:

- Estimate minimum parking demands using Town Zoning Code Requirements.
- Estimate maximum parking demands using peak demand assumptions.

PROJECT DESCRIPTION

Lou Gehrig Amherst Park located on 50 Dann Road in East Amherst consists of eleven (11) baseball and softball diamonds. The complex splits parking into two separate parking areas one on Dann Road and the other on Smith Road. Currently both lots consist of broken asphalt and gravel with the only exception being a paved section next to the concession stand in the Dann Road lot. Due to lack of striping for identifying the number of existing parking spaces, aerial photography was used to estimate a total of 258 parking spaces. There are approximately 160 parking spaces at Smith Road and 98 at Dann Road.

PARKING REQUIREMENTS IN THE TOWN OF AMHERST ZONING CODE

The Town of Amherst code 7-1-6 Schedule of Parking Requirements for outdoor recreation fields requires 1 parking space per 3 seats or per 3 recreation participants.

7-1-6. **Schedule of Parking Requirements.**

A. **Minimum Parking Requirements.** Off-street parking facilities shall be provided in quantities not less than set forth in the following schedule: **[Amended 2-4-2008 by L.L. No. 1-2008]**

Schedule of Parking Requirements	
Outdoor recreation fields (Football, soccer, baseball, bocce ball, etc.)	1 per 3 seats or per 3 recreation participants

Due to lack of seating /bleachers to quantity parking spaces requirements, parking spaces per number of participants was used. We assumed at peak usage there would be a game on all eleven (11) fields and each team playing consists of fourteen (14) participants, therefore each field would require five (5) parking spaces for each team playing. We also included two (2) umpires for every game being played. Lastly, an additional ten (10) parking spaces were designated for the concessions stand staff and grounds crew. With these peak assumptions 152 parking spaces would be needed to meet the Towns parking requirements. This calculation can be seen in Table 1.

TABLE 1 – Minimum Required Parking Spaces Per Code

	Umpires	Team 1	Team 2	Concessions	Grounds
Diamond 1	2	5	5	5	5
Diamond 2	2	5	5		
Diamond 3	2	5	5		
Diamond 4	2	5	5		
Diamond 5	2	5	5		
Diamond 6	2	5	5		
Diamond 7	2	5	5		
Diamond 8	2	5	5		
Diamond 9	2	5	5		
Diamond 10	2	5	5		
Diamond 11	2	5	5		
				Total:	142

PEAK PARKING DEMAND

In the next analysis, the maximum demand was considered by assuming every participant would arrive separately requiring 14 spots for every team playing. The remaining assumptions identified above have stayed the same. With this set of assumptions 340 parking spaces would be required. This calculation game be seen in Table 2.

TABLE 2 – Maximum Required Parking Spaces

	Umpires	Team 1	Team 2	Concessions	Grounds
Diamond 1	2	14	14	5	5
Diamond 2	2	14	14		
Diamond 3	2	14	14		
Diamond 4	2	14	14		
Diamond 5	2	14	14		
Diamond 6	2	14	14		
Diamond 7	2	14	14		
Diamond 8	2	14	14		
Diamond 9	2	14	14		
Diamond 10	2	14	14		
Diamond 11	2	14	14		
				Total:	340

CONCLUSION:

Based on the proposed parking lot layouts, 83 spaces on Dann and 271 spaces on Smith are proposed. Both sites combining for a total of 354 spaces. In summary, the proposed parking layout exceeds the towns requirements by 212 spaces and is also capable of handling the assumed maximum calculated demand Lou Gehrig could expect to see during peak times. ITE peak demands are also included in attachments for reference purposes but were not used in comparison since they were less than the peak parking demand that was calculated.

Sincerely,

Christopher Chapman, PE

Schedule of Parking Requirements	
Dance, art, music or photo studio or classroom	1 per 75 sf of gross floor area devoted to activity
Funeral home or mortuary	20 per parlor
Go-cart track	2 per cart plus 1 per 60 sf of waiting area
Golf course	3 per hole, minimum 10 spaces
Golf driving range	1 per driving stall, plus spaces as required for retail activities
Hair, tanning, and other personal care services	2 per chair or operating station
Hotels, motels, tourist houses	1 space per room, plus 1 per 6 seats in restaurant/bar area, plus 1 per 5 persons of posted capacity in conference or meeting room
Indoor recreation not otherwise listed	1 per 250 sf of floor area devoted to activity, plus 1 per 3 seats or 3 persons of posted capacity if there are no seats
Miniature golf	1 per hole, plus spaces required for assembly space
Office, professional or not otherwise listed	1 per 200 sf of net floor area
Outdoor recreation fields (Football, soccer, baseball, bocce ball, etc.)	1 per 3 seats or per 3 recreation participants
~~Parking, commercial~~	~~1 space per employee on the~~ maximum shift
Restaurant, take-out only	1 per 10 sf of take-out floor area **[Amended 4-12-2010 by L.L. No. 2-2010]**
Restaurant, bar, banquet hall, and dining area	1 per 3 seats, plus 1 per 100 sf for customer area or takeout

ITE TABLES

Note: ITE has limitations for selecting type of recreational field regarding softball and baseball. A soccer field has been selected since it has similar demands and participants for its use as softball and baseball diamonds.

Soccer Field - Non-Tournament
(488)

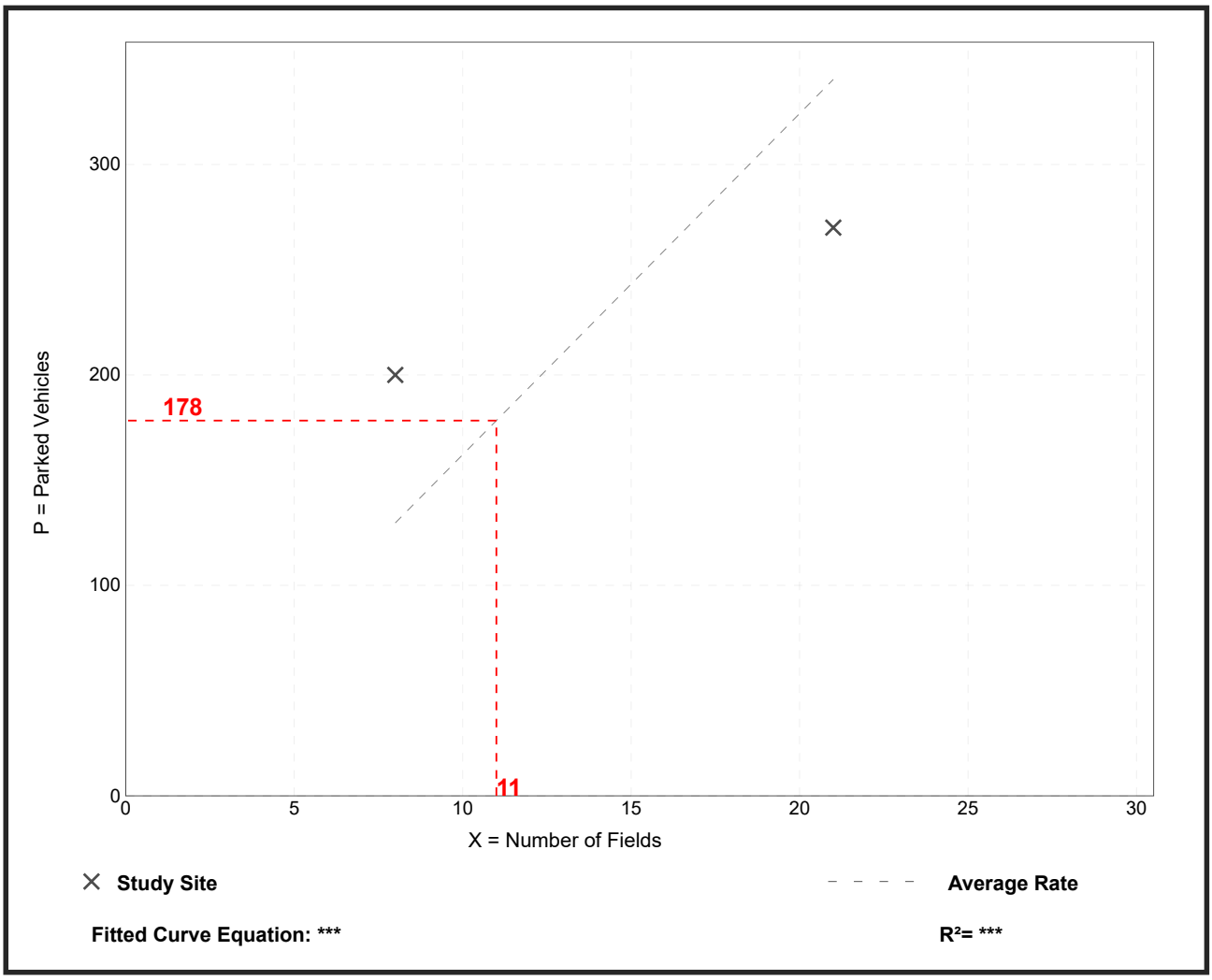
Peak Period Parking Demand vs: **Fields**
On a: **Saturday**
Setting/Location: **General Urban/Suburban**
Number of Studies: 2
Avg. Num. of Fields: 15

Peak Period Parking Demand per Field

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
16.21	12.86 - 25.00	*** / ***	***	***

Data Plot and Equation

Caution – Small Sample Size



Parking Generation Manual, 6th Edition ● Institute of Transportation Engineers

Soccer Field - Non-Tournament
(488)

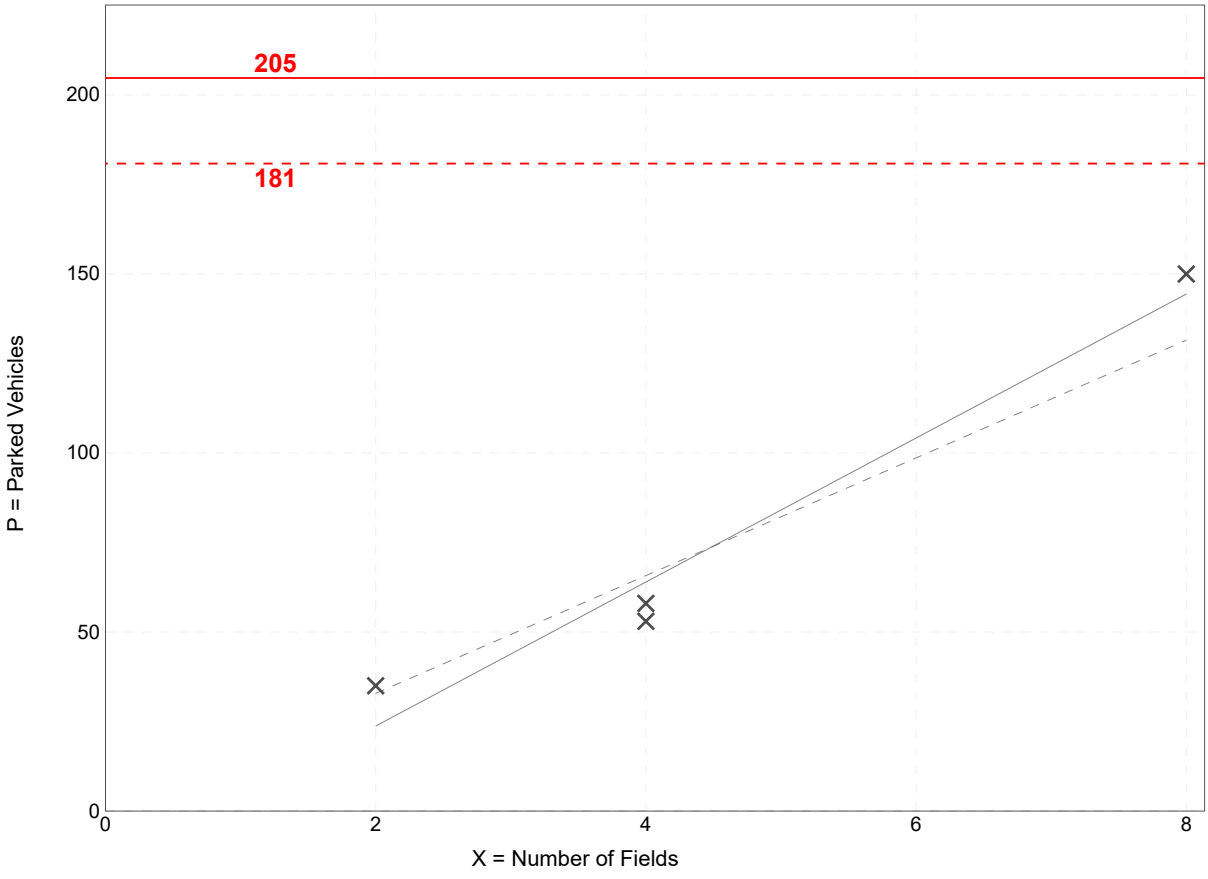
Peak Period Parking Demand vs: **Fields**
On a: **Weekday (Monday - Thursday)**
Setting/Location: **General Urban/Suburban**
Number of Studies: 4
Avg. Num. of Fields: 4.5

Peak Period Parking Demand per Field

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
16.44	13.25 - 18.75	14.06 / 18.75	***	2.73 (17%)

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: P = 20.11(X) - 16.47 **R^2= 0.96**

Parking Generation Manual, 6th Edition ● Institute of Transportation Engineers

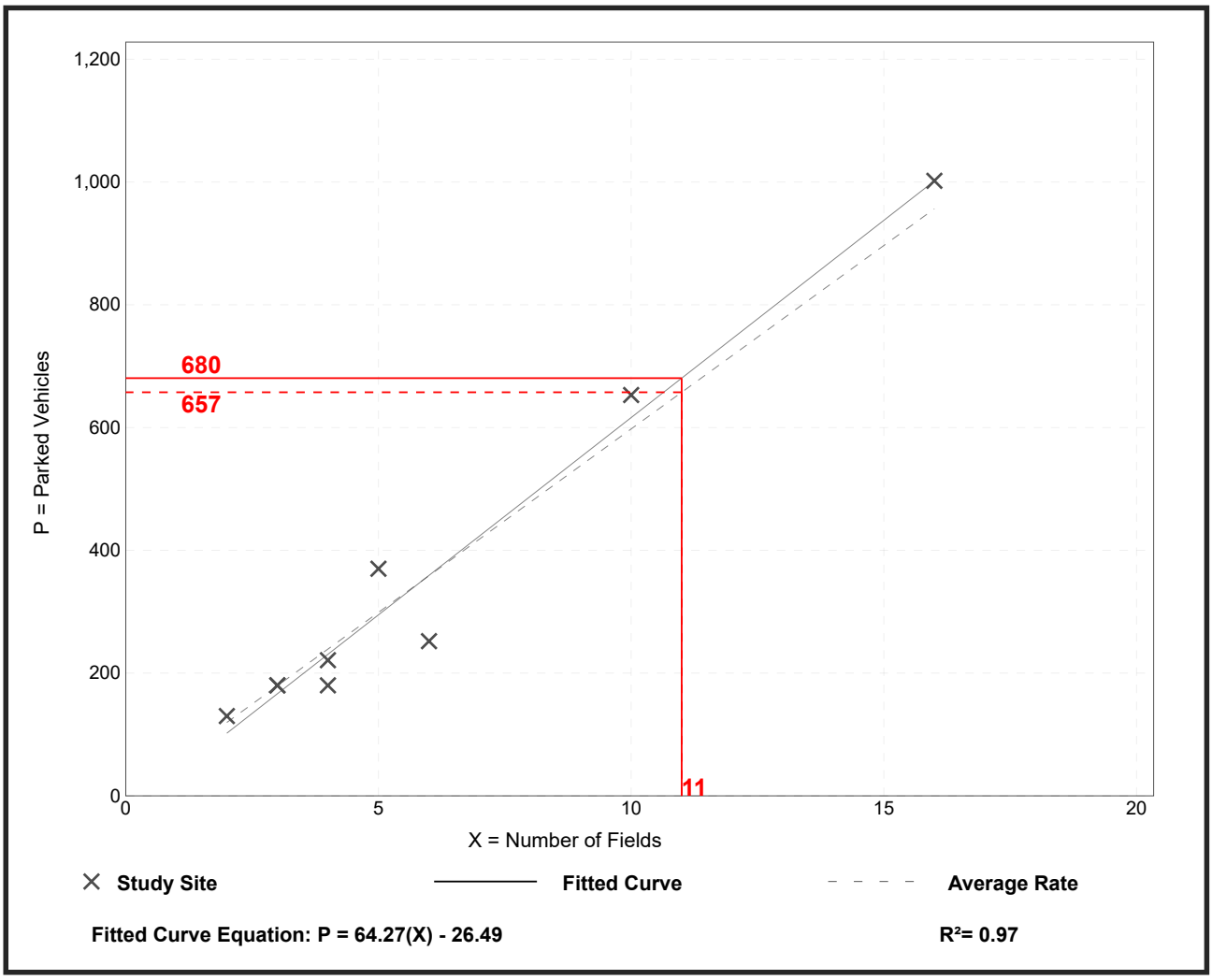
Soccer Field - Tournament
(488)

Peak Period Parking Demand vs: **Fields**
On a: **Saturday**
Setting/Location: **General Urban/Suburban**
Number of Studies: 9
Avg. Num. of Fields: 5.8

Peak Period Parking Demand per Field

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
59.77	42.00 - 74.00	56.68 / 69.65	***	9.61 (16%)

Data Plot and Equation



Parking Generation Manual, 6th Edition ● Institute of Transportation Engineers