

## MEMORANDUM

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Date: November 1, 2024  
To: Davis Dinkins, PE  
Dinkins Engineering  
125 NE 1<sup>st</sup> Avenue, Suite 2  
Ocala, FL 34470  
From: Kok Wan Mah, PE  
Project: Ocala West Shopping Center  
Subject: Parking Demand Evaluation

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Project #: 30184.001

The purpose of this memorandum is to provide an evaluation of the parking demand for the Ocala West Shopping Center for the current and proposed uses based on *ITE Parking Generation Handbook* rates. The existing shopping center includes the following uses:

- Blockers Furniture Store: 81,272 sf
- Sky Zone Trampoline Park: 31,775 sf
- Hobby Lobby Home and Craft Store: 69,441 sf
- Multi-tenant strip retail: 13,439 sf
- Twistee Treat Ice Cream: 642 sf

A summary of the parking generation is provided in **Table 1** using ITE Land Use Codes that would be the most appropriate for each use. The 85<sup>th</sup>-percentile rates were used to provide a conservatively higher calculated demand for parking over the average rates. For the trampoline park, the parking generation would be different than a standard commercial use. There is not an ITE code for trampoline park. Consideration was given to using an ice skating rink as the trip and parking generation characteristics were thought to be similar. However, there were only two data points. This was compared to an Athletic Club which showed an average parking rate slightly higher than ice skating rink, but with more data points to calculate an 85<sup>th</sup> percentile parking demand. Hobby Lobby is a retail store that specializes in providing decorative housewares and craft supplies. A discount store rate was used for this use. For the Twistee Treat, the ITE code for a coffee/donut shop with drive-thru was used.

Based on the City of Ocala's Code of Ordinances (Sec. 122-1010), the required parking for a commercial shopping center is 1 space for every 250 square feet. This would equate to 784 spaces for the 195,927 SF shopping center. Additionally, the number of parking spaces needed for the Twistee Treat is based on one parking space for each three seats in the rooms for customer service, plus one space for each two employees. The site includes a total of 8 employees and 36 seats, which equates to 16 required parking spaces. Therefore, the total required by the shopping center per City code is 800 parking spaces.

Using the specific uses based on *ITE Parking Generation Handbook* presented in **Table 1** shows a demand of 442 spaces for a typical weekday using the 85<sup>th</sup>-percentile rates from the ITE Parking Generation Manual, a reduction of 44%. Similarly, the Saturday parking rate is 555 spaces for the 85<sup>th</sup>-percentile. It should be noted that these calculations do not include the Race Wash or the adjacent outparcel.

**Table 1 - Summary of Parking Generation**  
Ocala West Shopping Center

Use	ITE Land Use	ITE LUC	Intensity (ksf)	City Code	ITE Parking Generation			
					Weekday 85th-Percentile Parking Rate	Parking Demand	Saturday 85th-Percentile Parking Rate	Parking Demand
Blockers Furniture	Furniture Store	890	81.272	784	0.87	71	1.64	133
Sky Zone Trampoline Park	Athletic Club	493	31.775		4.88	155	5.60	178
Hobby Lobby	Discount Store	815	69.441		2.15	149	2.56	178
Strip Retail Multi-Tenant	Strip Retail Plaza	822	13.439		4.44	60	4.36	59
Twistee Treat (8 empl, 36 seats)	Coffee/Donut w Drive Thru	937	0.642	16	10.75	7	11.85	8
Total Parking				By Code * 800	85th %-ile 442		85th %-ile 555	

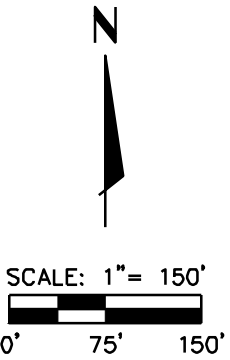
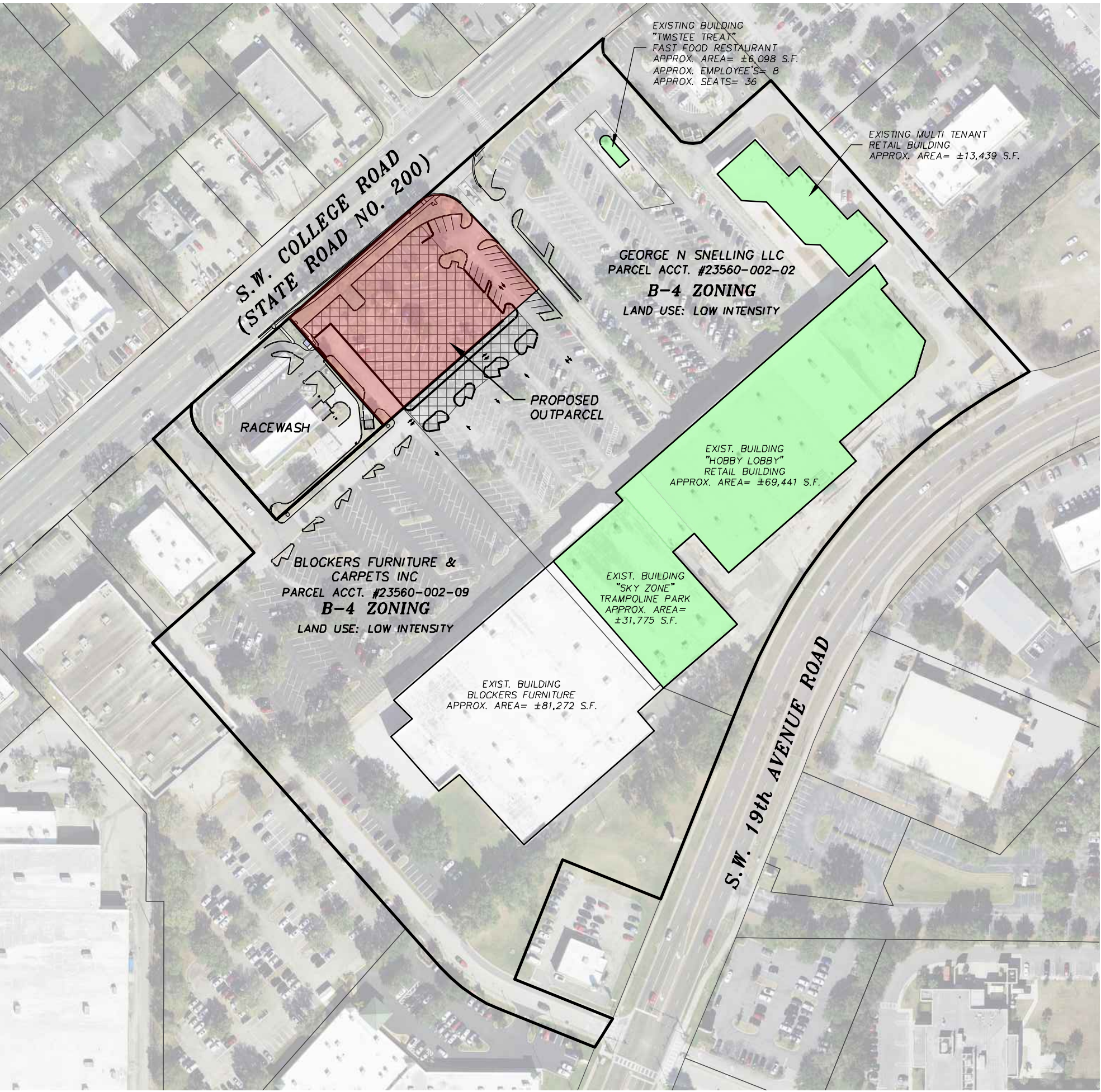
\* Assumes 1 space per 250 sf for 195,927 sf and one parking space for each three seats in the rooms for customer service, plus one space for each two employees for the Twistee Treat using 8 employees and 36 seats.

The addition of the proposed outparcel would reduce the number of parking spaces in the shopping center lot to 642 spaces from the existing 796. This includes the parking removed due to the outparcel building footprint and drive aisles as well as the parking allocated to the outparcel. Although this is less than City Code, it is higher than the 85<sup>th</sup>-percentile parking demand based on ITE Parking Generation Handbook. We respectfully request the City to consider a reduction in the number of required parking spaces for the Ocala West Shopping Center based on the uses on the site. While it is recognized that adequate parking should be provided, having too much parking results in many areas of the parking lot sitting empty and underutilized. Empty parking lots can take away from the vibrancy of commercial uses and may deter customers. Although City Code shows a requirement for 800 spaces, the parking supply provided of 642 spaces is higher than the 555 spaces calculated using ITE Parking Generation Manual for a typical Saturday.

Please don't hesitate to contact us with any questions or comments.

Attachments:

- Site plan
- ITE Parking Generation pages



REVISED DATE: 08-28-24

**PARKING EXHIBIT**

**SNELLING – OCALA WEST OUTPARCEL**  
CITY OF OCALA, FLORIDA

**DAVIS DINKINS  
ENGINEERING, P.A.**  
CERTIFICATE OF AUTHORIZATION #28150

125 N.E. 1st AVENUE  
SUITE 2  
OCALA, FL 34470  
PHONE: (352) 854-5961

# Land Use: 493 Athletic Club

## Description

An athletic club is a privately-owned facility that offers comprehensive athletic facilities. An athletic club typically has courts for racquet sports (e.g., tennis, racquetball, pickleball, squash, handball); a basketball court; a sauna or spa; and fitness, exercise, and weightlifting rooms. Athletic clubs typically provide a swimming pool or whirlpool. They often offer diverse, competitive team sport activities and social facilities. These facilities are membership clubs that may allow access to the general public for a fee.

## Time-of-Day Distribution for Parking Demand

The following table presents a time-of-day distribution of parking demand on a weekday at one study site in a general urban/suburban setting.

Hour Beginning	Percent of Weekday Peak Parking Demand
12:00–4:00 a.m.	—
5:00 a.m.	—
6:00 a.m.	50
7:00 a.m.	51
8:00 a.m.	53
9:00 a.m.	46
10:00 a.m.	40
11:00 a.m.	40
12:00 p.m.	37
1:00 p.m.	36
2:00 p.m.	57
3:00 p.m.	91
4:00 p.m.	100
5:00 p.m.	89
6:00 p.m.	74
7:00 p.m.	—
8:00 p.m.	—
9:00 p.m.	—
10:00 p.m.	—
11:00 p.m.	—

## **Additional Data**

The average parking supply ratios for the study sites with parking supply information are 5.0 spaces per 1,000 square feet GFA (three sites) in a general urban/suburban setting and 0.3 spaces per 1,000 square feet GFA (one site) in a center city core setting. The average peak parking occupancy at the three general urban/suburban sites is 65 percent; at the center city core site, peak parking occupancy is 93 percent.

The sites were surveyed in the 1990s and the 2020s in Arizona, California, and Oregon.

## **Source Numbers**

275, 276, 435, 632

# Athletic Club (493)

Peak Period Parking Demand vs: 1000 Sq. Ft. GFA

On a: Weekday (Monday - Friday)

Setting/Location: General Urban/Suburban

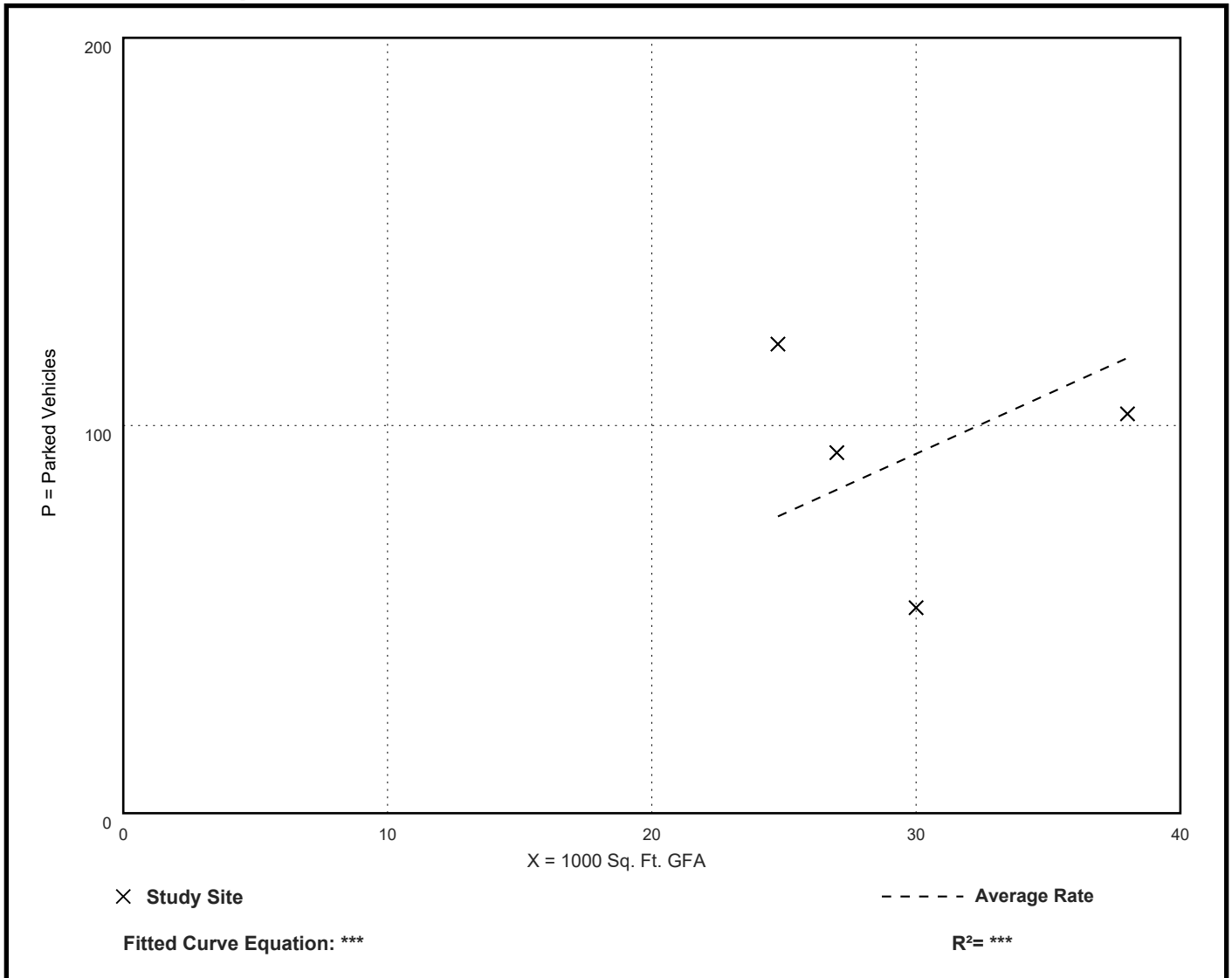
Number of Studies: 4

Avg. 1000 Sq. Ft. GFA: 30

## Peak Period Parking Demand per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
3.09	1.77 - 4.88	2.38 / 4.88	***	1.25 ( 40% )

## Data Plot and Equation



# Land Use: 495 Recreational Community Center

## Description

A recreational community center is a stand-alone public facility similar to and including YMCAs. These facilities often include classes and clubs for adults and children, a day care or nursery school, meeting rooms and other social facilities, swimming pools and whirlpools, saunas, tennis, racquetball, handball, pickleball, basketball and volleyball courts; outdoor athletic fields/courts, exercise classes, weightlifting and gymnastics equipment, locker rooms, and a restaurant or snack bar. Public access is typically allowed and a membership fee may be charged.

## Time-of-Day Distribution for Parking Demand

The following table presents a time-of-day distribution of parking demand on a weekday (three study sites), a Saturday (one study site), and a Sunday (one study site) in a general urban/suburban setting.

Hour Beginning	Percent of Peak Parking Demand		
	Weekday	Saturday	Sunday
12:00–4:00 a.m.	—	—	—
5:00 a.m.	—	—	—
6:00 a.m.	—	—	—
7:00 a.m.	58	50	—
8:00 a.m.	72	75	—
9:00 a.m.	95	100	—
10:00 a.m.	94	89	—
11:00 a.m.	95	80	11
12:00 p.m.	83	68	43
1:00 p.m.	65	60	69
2:00 p.m.	56	60	84
3:00 p.m.	64	53	100
4:00 p.m.	75	52	75
5:00 p.m.	84	49	—
6:00 p.m.	100	50	—
7:00 p.m.	99	50	—
8:00 p.m.	—	—	—
9:00 p.m.	—	—	—
10:00 p.m.	—	—	—
11:00 p.m.	—	—	—

## **Additional Data**

The average parking supply ratio for 12 study sites in a general urban/suburban setting is 2.8 spaces per 1,000 square feet GFA. For one site in a dense multi-use urban setting, the parking supply ratio is 1.2 spaces per 1,000 square feet GFA. The average peak parking occupancy at the general urban/suburban sites is 68 percent. The peak parking occupancy at the dense multi-use urban site is 98 percent.

The sites were surveyed in the 1990s, the 2000s, the 2010s, and the 2020s in Alberta (CAN), Arizona, British Columbia (CAN), Minnesota, New Jersey, New York, Ontario (CAN), Oregon, Pennsylvania, and Utah.

## **Source Numbers**

276, 431, 514, 516, 530, 555, 632

# Recreational Community Center (495)

Peak Period Parking Demand vs: 1000 Sq. Ft. GFA

On a: Weekday (Monday - Friday)

Setting/Location: General Urban/Suburban

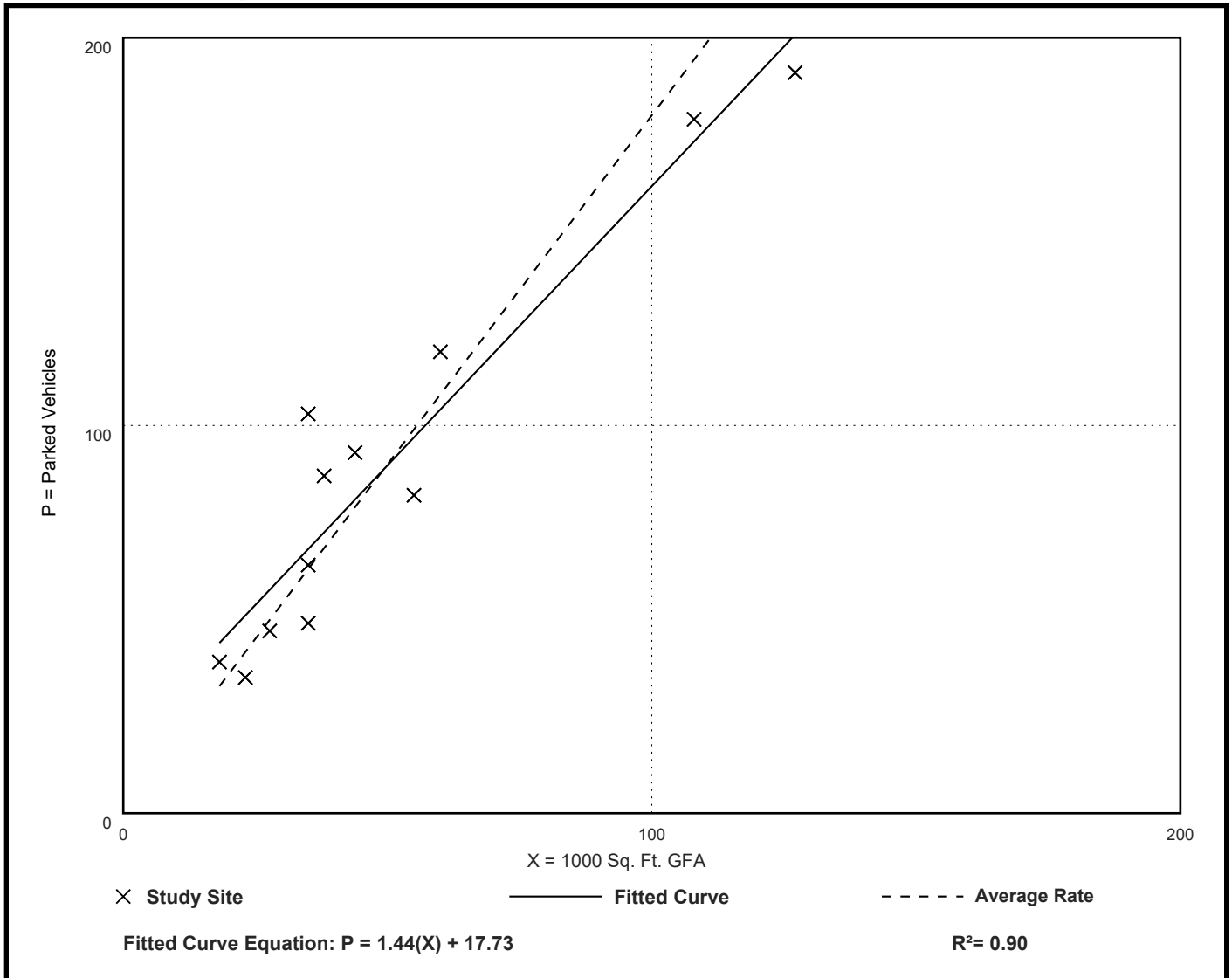
Number of Studies: 12

Avg. 1000 Sq. Ft. GFA: 51

## Peak Period Parking Demand per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
1.80	1.40 - 2.94	1.56 / 2.32	***	0.40 ( 22% )

## Data Plot and Equation



# Recreational Community Center (495)

Peak Period Parking Demand vs: 1000 Sq. Ft. GFA

On a: Saturday

Setting/Location: General Urban/Suburban

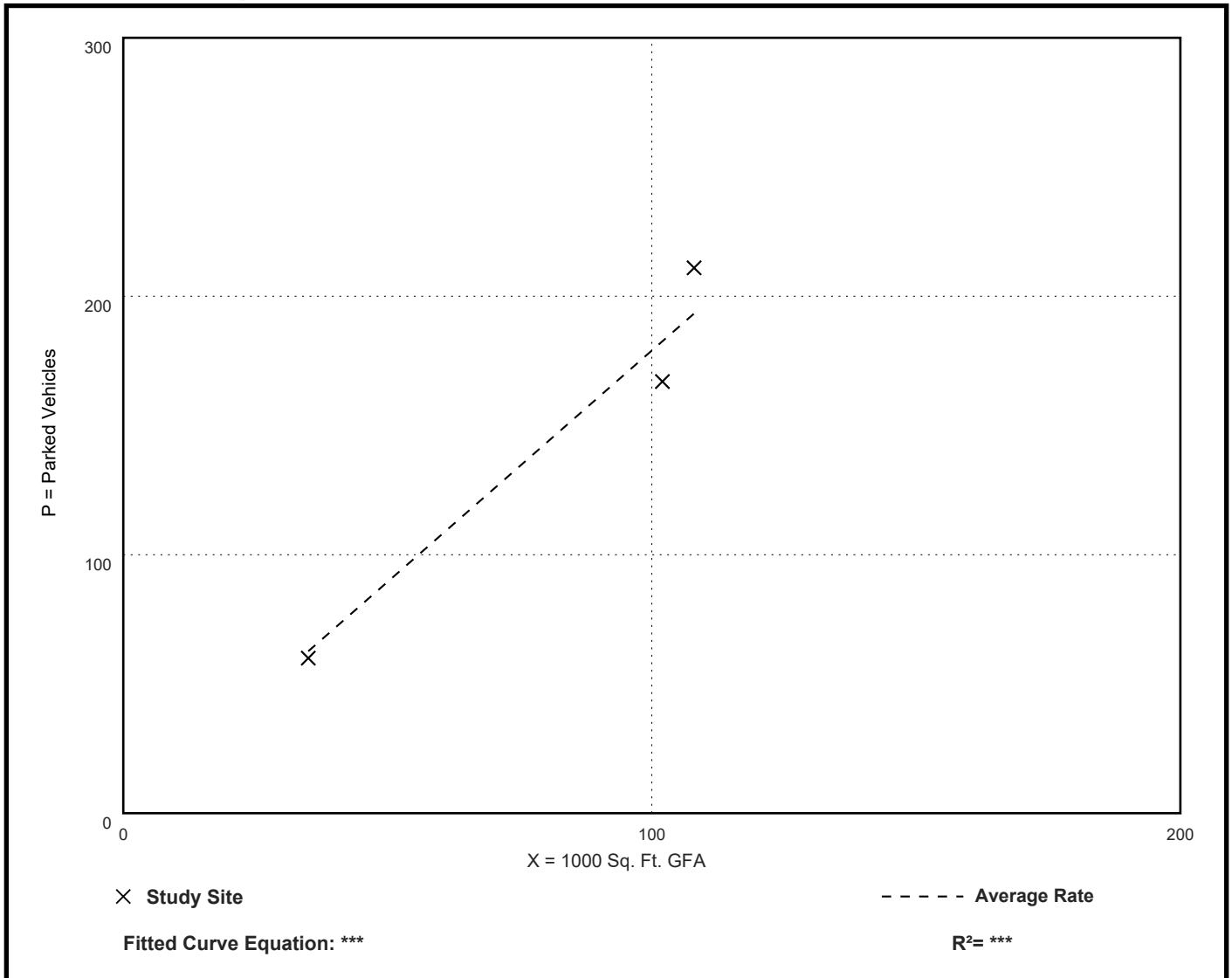
Number of Studies: 3

Avg. 1000 Sq. Ft. GFA: 82

## Peak Period Parking Demand per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
1.79	1.64 - 1.95	1.66 / 1.95	***	0.18 ( 10% )

## Data Plot and Equation



# Land Use: 815 Free-Standing Discount Store

## Description

A discount store is similar to a free-standing discount superstore (Land Use 813) with the exception that it does not contain a full-service grocery department. A discount store typically offers centralized cashiering, sells products that are advertised at discount prices, offers a variety of customer services, and maintains long store hours 7 days a week. The stores included in this land use are often the only ones on the site but they can also be found in mutual operation with a related or unrelated garden center and/or service station. A free-standing discount store can also be found on a separate parcel within a retail complex, with or without its own dedicated parking.

## Time-of-Day Distribution for Parking Demand

The following table presents a time-of-day distribution of parking demand on a weekday (five study sites) and a Saturday (four study sites) in a general urban/suburban setting.

Hour Beginning	Percent of Peak Parking Demand	
	Weekday	Saturday
12:00–4:00 a.m.	—	—
5:00 a.m.	—	—
6:00 a.m.	—	—
7:00 a.m.	—	—
8:00 a.m.	—	—
9:00 a.m.	—	—
10:00 a.m.	—	—
11:00 a.m.	86	85
12:00 p.m.	100	97
1:00 p.m.	92	98
2:00 p.m.	95	100
3:00 p.m.	95	99
4:00 p.m.	93	98
5:00 p.m.	84	91
6:00 p.m.	—	—
7:00 p.m.	—	—
8:00 p.m.	—	—
9:00 p.m.	—	—
10:00 p.m.	—	—
11:00 p.m.	—	—

## **Additional Data**

A garden center contained within the principal outside faces of the exterior building walls is included in the gross square floor area. An outdoor or fenced-in area outside the principal outside faces of the exterior building walls is excluded.

The average parking supply ratio for the seven study sites in a general urban/suburban setting with parking supply information is 3.9 spaces per 1,000 square feet GFA. The average peak parking occupancy at these seven sites is 39 percent.

The sites were surveyed in the 1990s, the 2000s, the 2010s, and the 2020s in California, Kansas, New Jersey, Ontario, (CAN), Oregon, and Washington.

*To assist in the future analysis of this land use, it is important to collect and include information on the presence and size of garden centers and outdoor fenced-in space in parking generation data submissions.*

## **Source Numbers**

209, 297, 413, 433, 511, 634

# Free-Standing Discount Store (815)

Peak Period Parking Demand vs: 1000 Sq. Ft. GFA

On a: Weekday (Monday - Friday)

Setting/Location: General Urban/Suburban

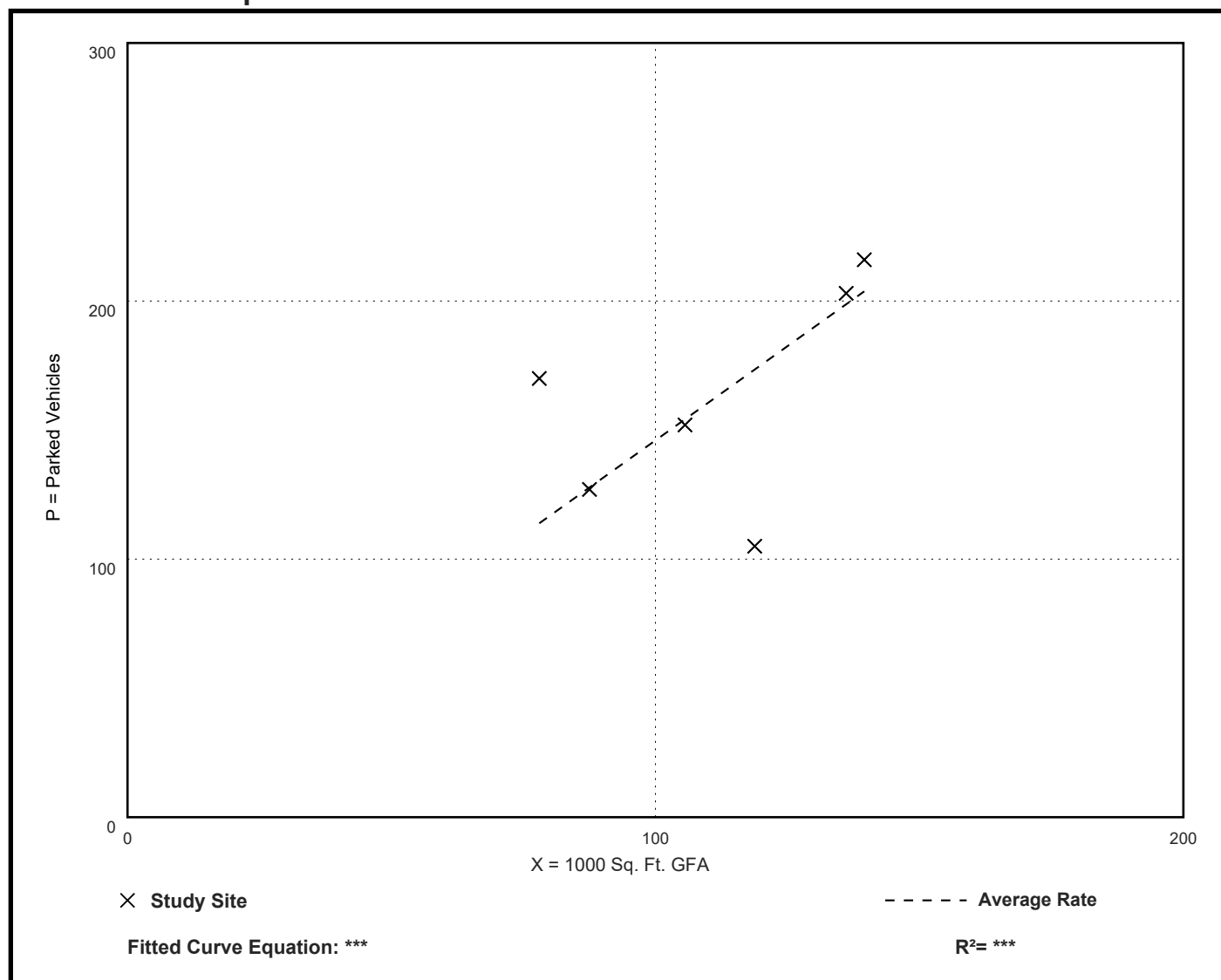
Number of Studies: 6

Avg. 1000 Sq. Ft. GFA: 111

## Peak Period Parking Demand per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
1.46	0.88 - 2.18	1.44 / 2.15	***	0.38 ( 26% )

## Data Plot and Equation



# Free-Standing Discount Store (815)

Peak Period Parking Demand vs: 1000 Sq. Ft. GFA

On a: Saturday

Setting/Location: General Urban/Suburban

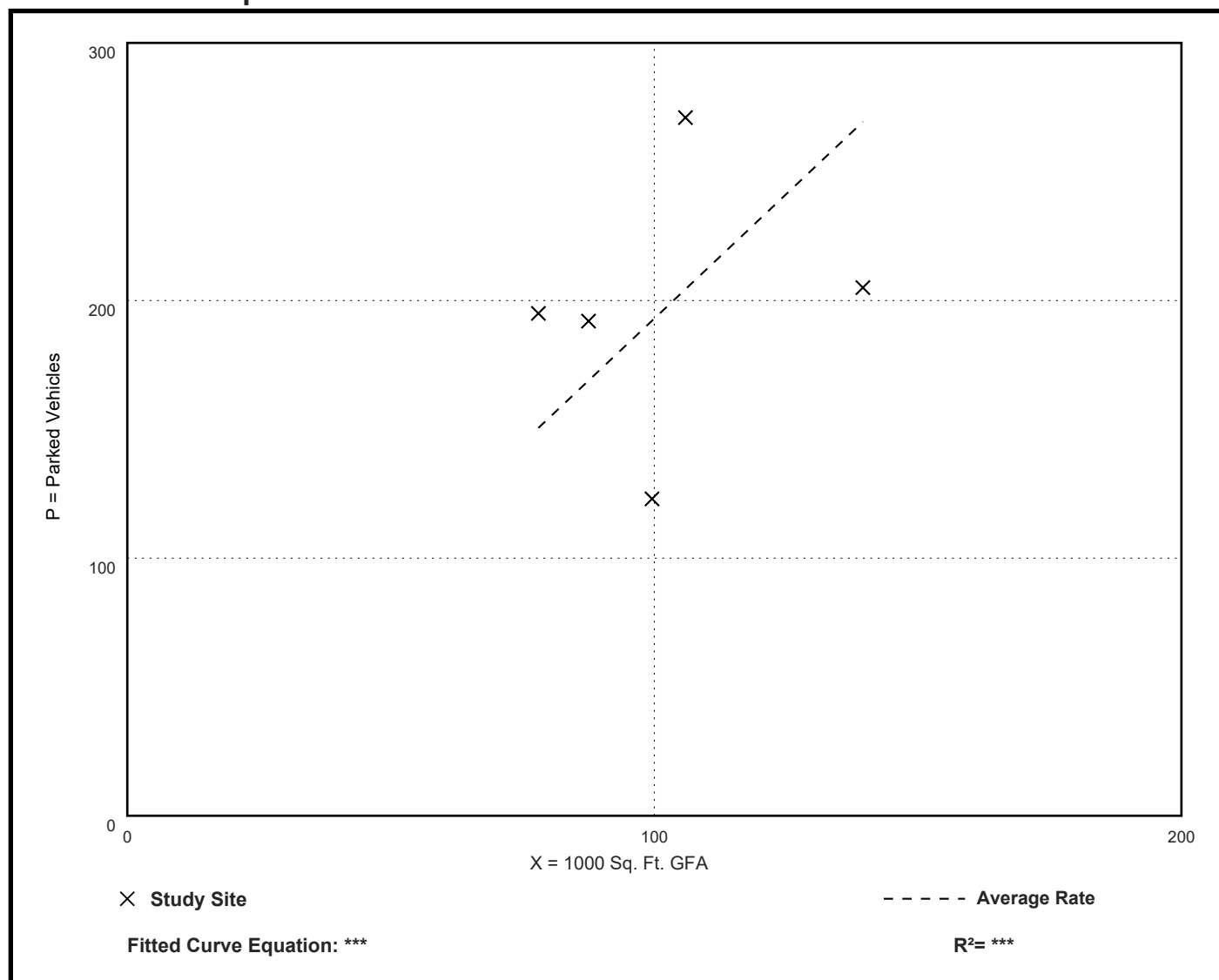
Number of Studies: 5

Avg. 1000 Sq. Ft. GFA: 102

## Peak Period Parking Demand per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
1.93	1.24 - 2.56	1.46 / 2.56	***	0.61 ( 32% )

## Data Plot and Equation



# Land Use: 822 Strip Retail Plaza (<40k)

## Description

A strip retail plaza is an integrated group of commercial establishments that is planned, developed, owned, and managed as a unit. Each study site in this land use has less than 40,000 square feet of gross leasable area (GLA). Because a strip retail plaza is open-air, the GLA is the same as the gross floor area (GFA) of the building.

The 40,000 square feet GLA threshold between shopping plaza and strip retail plaza (Land Use 822) is based on an examination of the parking demand database. All shopping plazas with a supermarket as their anchor in the database are larger than 40,000 square feet GLA.

## Time-of-Day Distribution for Parking Demand

The following table presents a time-of-day distribution of parking demand on a Monday–Thursday (five study sites), a Friday (two study sites), and a Saturday (four study sites).

Hour Beginning	Percent of Peak Parking Demand		
	Monday–Thursday	Friday	Saturday
12:00–4:00 a.m.	—	—	—
5:00 a.m.	—	—	—
6:00 a.m.	—	—	—
7:00 a.m.	—	—	—
8:00 a.m.	19	19	—
9:00 a.m.	33	40	38
10:00 a.m.	47	44	55
11:00 a.m.	55	52	66
12:00 p.m.	89	96	85
1:00 p.m.	100	96	100
2:00 p.m.	73	84	96
3:00 p.m.	73	52	79
4:00 p.m.	66	50	66
5:00 p.m.	70	63	64
6:00 p.m.	75	49	67
7:00 p.m.	70	100	70
8:00 p.m.	54	94	70
9:00 p.m.	48	73	51
10:00 p.m.	—	—	—
11:00 p.m.	—	—	—

## **Additional Data**

The average parking supply ratios for the study sites with parking supply information are the following:

- 5.7 spaces per 1,000 square feet GLA (24 sites) in a general urban/suburban setting
- 3.3 spaces per 1,000 square feet GLA (3 sites) in a dense multi-use urban setting

The average peak parking occupancy is 50 percent at the general urban/suburban sites and 76 percent at the dense multi-use urban sites.

The sites were surveyed in the 1990s, the 2010s, and the 2020s in Alberta (CAN), British Columbia (CAN), California, Colorado, Kansas, Maine, Manitoba (CAN), Maryland, Michigan, Minnesota, Missouri, New York, Texas, Virginia, and Washington.

*Future data submissions should attempt to provide information on the composition of each study site (types and number of stores, restaurants, or other tenants within the shopping center).*

## **Source Numbers**

89, 209, 219, 297, 511, 601, 605, 606, 618, 619, 621, 635

# Strip Retail Plaza (< 40k) (822)

Peak Period Parking Demand vs: 1000 Sq. Ft. GLA

On a: Weekday (Monday - Thursday)

Setting/Location: General Urban/Suburban

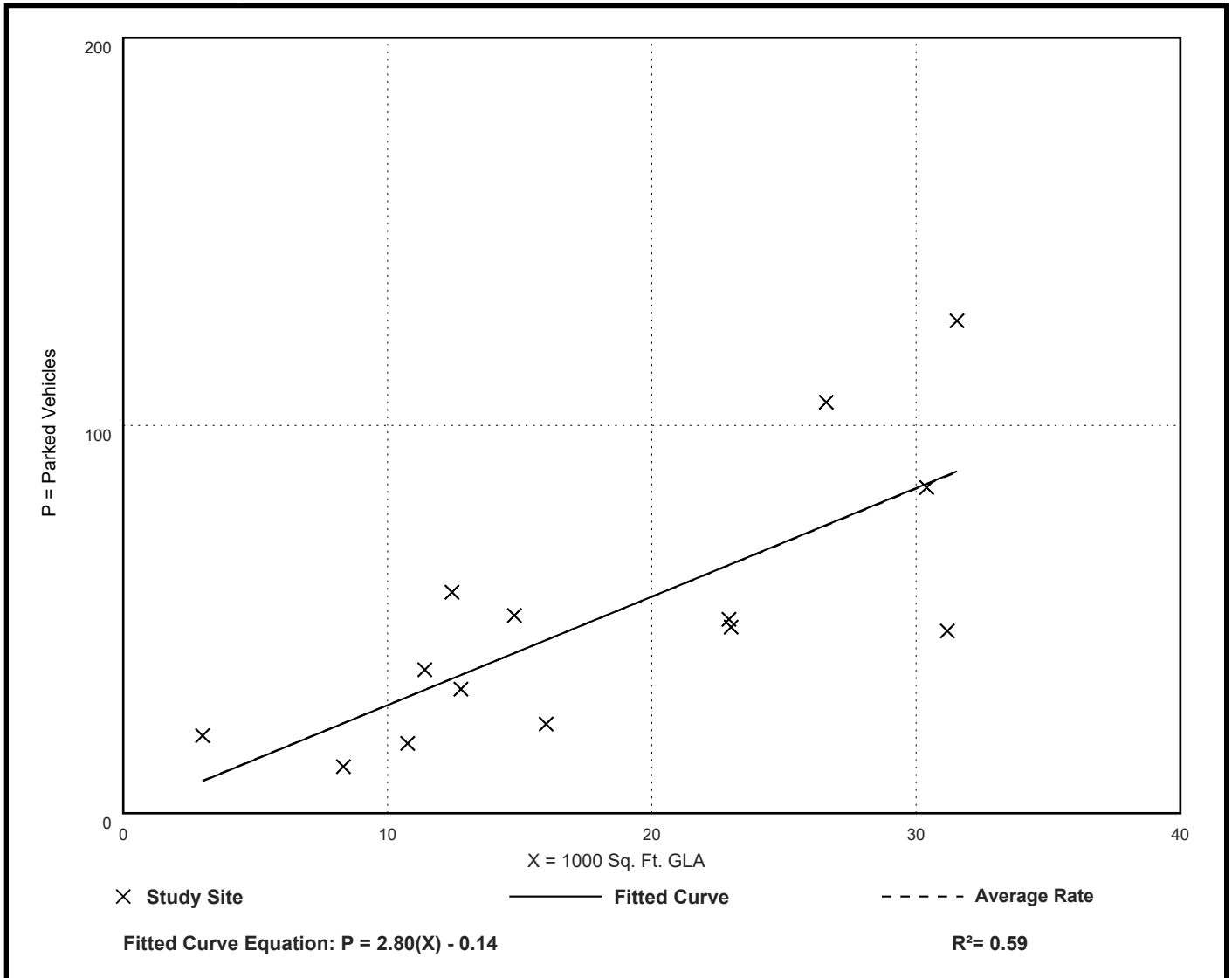
Number of Studies: 14

Avg. 1000 Sq. Ft. GLA: 18

## Peak Period Parking Demand per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
2.79	1.44 - 6.67	2.07 / 4.44	***	1.14 ( 41% )

## Data Plot and Equation



# Strip Retail Plaza (< 40k) (822)

Peak Period Parking Demand vs: 1000 Sq. Ft. GLA

On a: Saturday

Setting/Location: General Urban/Suburban

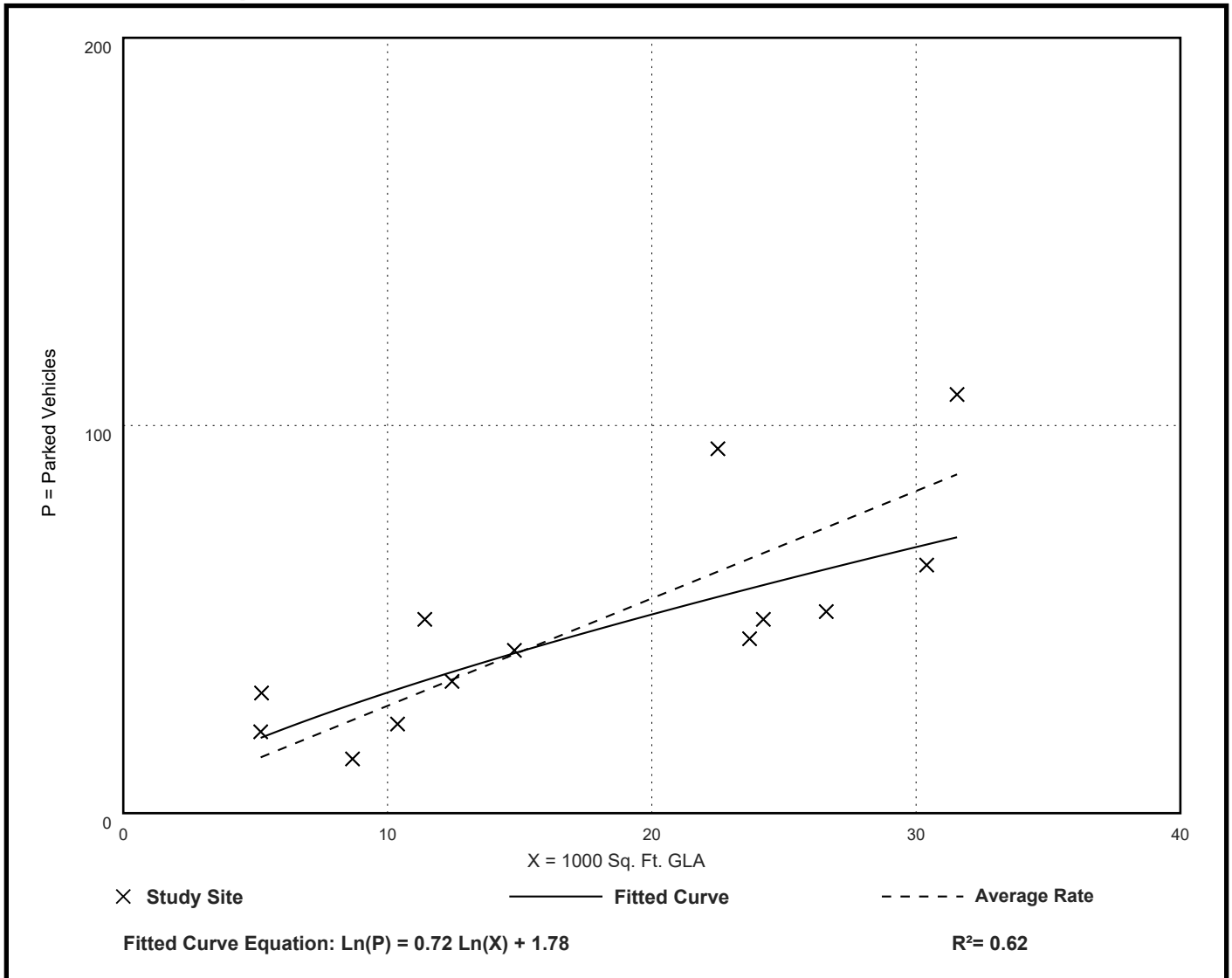
Number of Studies: 13

Avg. 1000 Sq. Ft. GLA: 17

## Peak Period Parking Demand per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
2.77	1.61 - 5.93	2.09 / 4.36	***	1.03 ( 37% )

## Data Plot and Equation



# Land Use: 890 Furniture Store

## Description

A furniture store is a full-service retail facility that specializes in the sale of furniture and often carpeting. Traditional retail furniture stores and warehouses with showrooms are included in this land use. Although some home accessories may be sold, a furniture store primarily focuses on the sale of pre-assembled furniture. A majority of the items sold at these facilities must be ordered for delivery.

## Time-of-Day Distribution for Parking Demand

The following table presents a time-of-day distribution of parking demand on a weekday (five study sites) and a Saturday (three study sites) in a general urban/suburban setting.

Hour Beginning	Percent of Peak Parking Demand	
	Weekday	Saturday
12:00–4:00 a.m.	—	—
5:00 a.m.	—	—
6:00 a.m.	—	—
7:00 a.m.	—	—
8:00 a.m.	—	—
9:00 a.m.	59	—
10:00 a.m.	67	—
11:00 a.m.	72	—
12:00 p.m.	100	64
1:00 p.m.	85	64
2:00 p.m.	85	86
3:00 p.m.	85	100
4:00 p.m.	90	92
5:00 p.m.	100	—
6:00 p.m.	59	—
7:00 p.m.	62	—
8:00 p.m.	49	—
9:00 p.m.	—	—
10:00 p.m.	—	—
11:00 p.m.	—	—

## **Additional Data**

The average parking supply ratio for the three study sites in a general urban/suburban setting with parking supply information is 1.6 spaces per 1,000 square feet GFA. The average peak parking occupancy at these three sites is 59 percent.

The sites were surveyed in the 1990s, the 2000s, and the 2010s in Massachusetts, Oregon, and Texas.

## **Source Numbers**

206, 278, 436, 566

# Furniture Store (890)

Peak Period Parking Demand vs: 1000 Sq. Ft. GFA

On a: Weekday (Monday - Friday)

Setting/Location: General Urban/Suburban

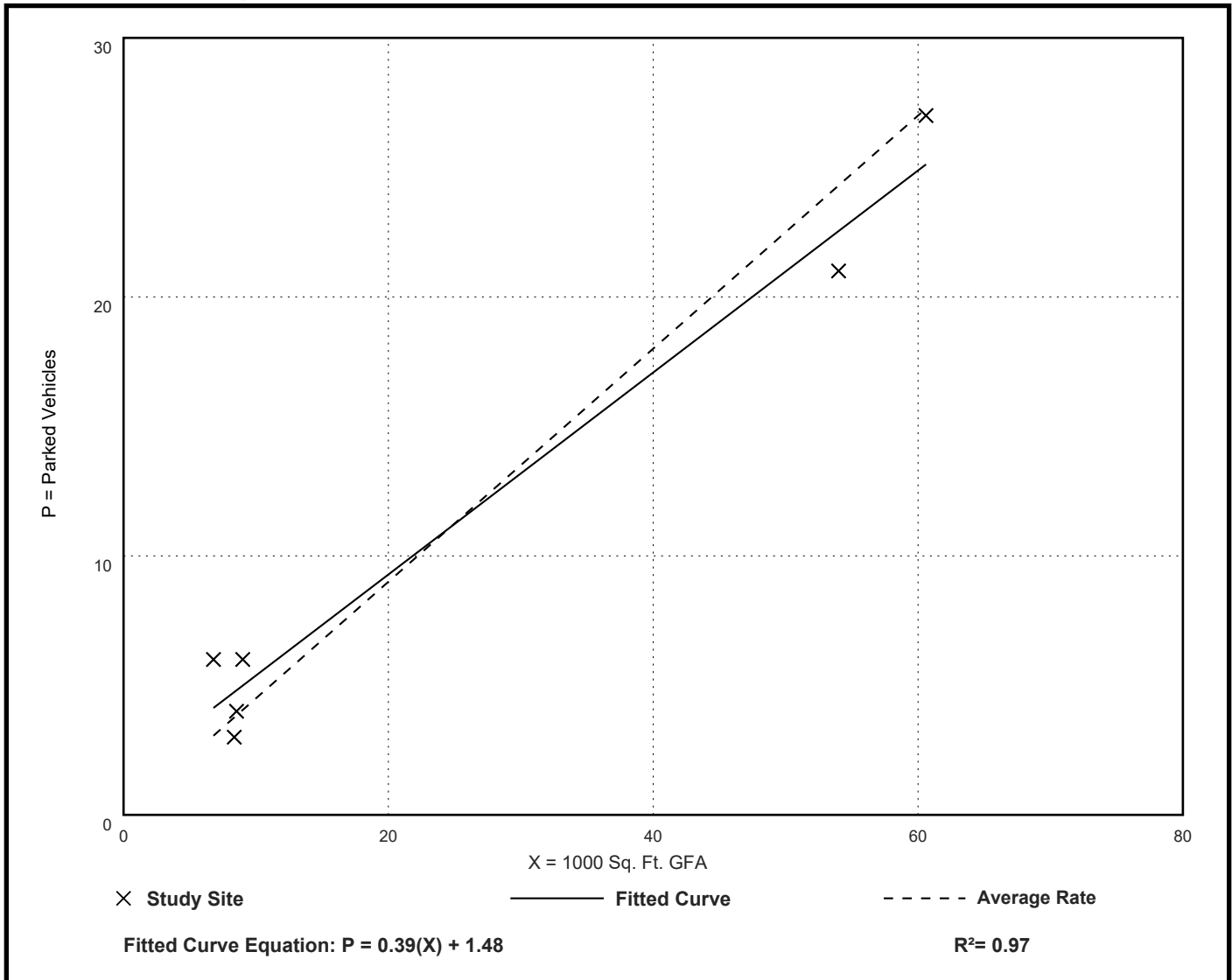
Number of Studies: 6

Avg. 1000 Sq. Ft. GFA: 25

## Peak Period Parking Demand per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
0.45	0.36 - 0.88	0.41 / 0.87	***	0.13 ( 29% )

## Data Plot and Equation



# Furniture Store (890)

Peak Period Parking Demand vs: 1000 Sq. Ft. GFA

On a: Saturday

Setting/Location: General Urban/Suburban

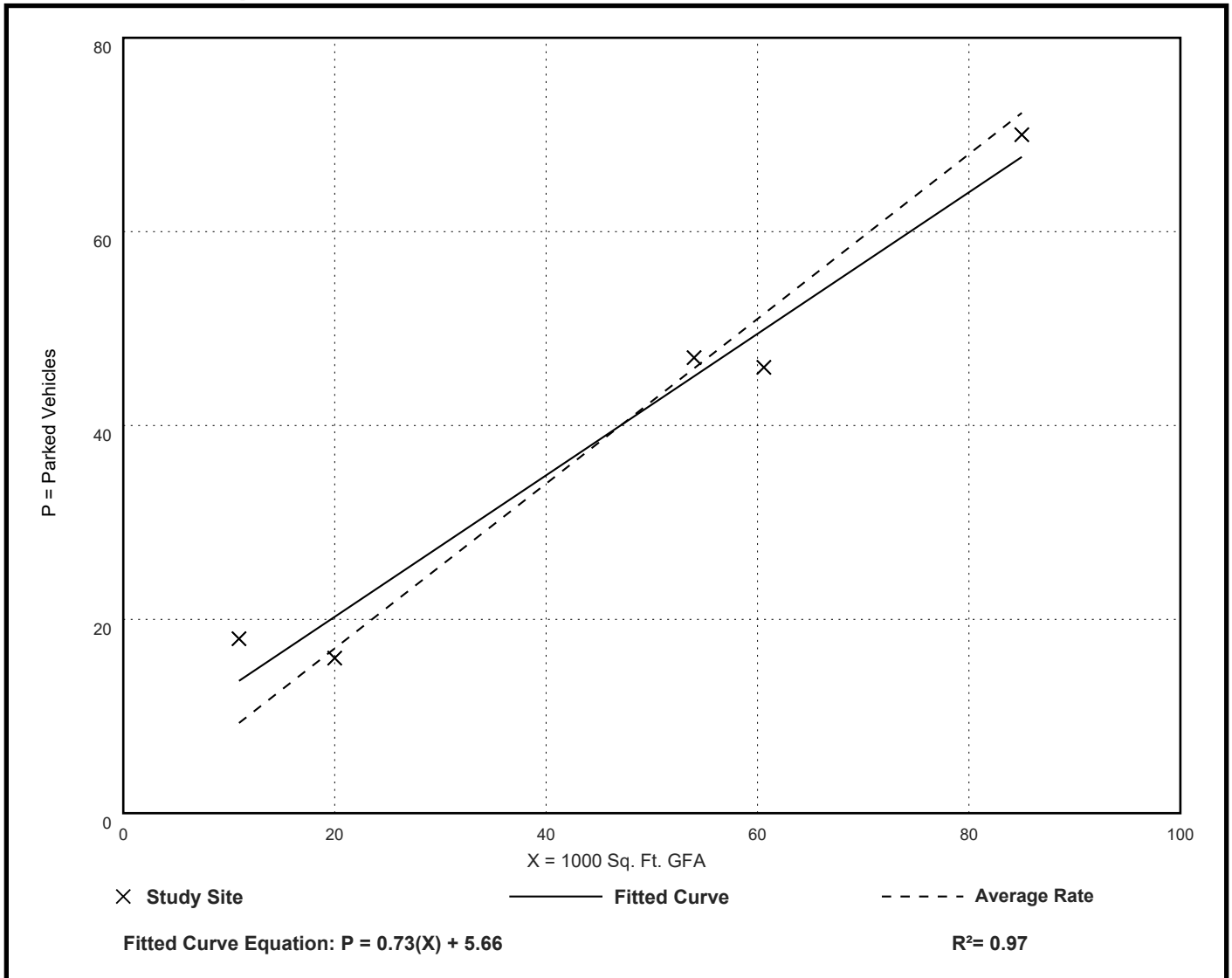
Number of Studies: 5

Avg. 1000 Sq. Ft. GFA: 46

## Peak Period Parking Demand per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
0.85	0.76 - 1.64	0.80 / 1.64	***	0.20 ( 24% )

## Data Plot and Equation



# Land Use: 937 Coffee/Donut Shop with Drive-Through Window

## Description

This land use includes any coffee and donut restaurant that has a drive-through window as well as a walk-in entrance area at which a patron can purchase and consume items. The restaurant sells freshly brewed coffee (along with coffee-related accessories) and a variety of food/drink products such as donuts, bagels, breads, muffins, cakes, sandwiches, wraps, salads, and other hot and cold beverages. The restaurant marketing and sales may emphasize coffee beverages over food (or vice versa). A coffee/donut shop typically holds long store hours (more than 15 hours) with an early morning opening. Limited indoor seating is generally provided for patrons and table service is not provided.

## Time-of-Day Distribution for Parking Demand

The following table presents a time-of-day distribution of parking demand on a weekday at four study sites in a general urban/suburban setting.

Hour Beginning	Percent of Monday–Thursday Peak Parking Demand
12:00–4:00 a.m.	–
5:00 a.m.	–
6:00 a.m.	–
7:00 a.m.	91
8:00 a.m.	100
9:00 a.m.	97
10:00 a.m.	97
11:00 a.m.	71
12:00 p.m.	77
1:00 p.m.	66
2:00 p.m.	54
3:00 p.m.	57
4:00 p.m.	63
5:00 p.m.	–
6:00 p.m.	–
7:00 p.m.	–
8:00 p.m.	–
9:00 p.m.	–
10:00 p.m.	–
11:00 p.m.	–

## **Additional Data**

The average parking supply ratio for the 12 study sites in a general urban/suburban setting and with parking supply information is 10.3 spaces per 1,000 square feet GFA. The average peak parking occupancy at these sites is 50 percent.

The sites were surveyed in the 2000s, the 2010s, and the 2020s in Maine, Nevada, New Jersey, Ontario (CAN), Tennessee, and Washington.

## **Source Numbers**

405, 407, 412, 433, 442, 509, 523, 540, 620

# Coffee/Donut Shop with Drive-Through Window (937)

Peak Period Parking Demand vs: 1000 Sq. Ft. GFA

On a: Weekday (Monday - Friday)

Setting/Location: General Urban/Suburban

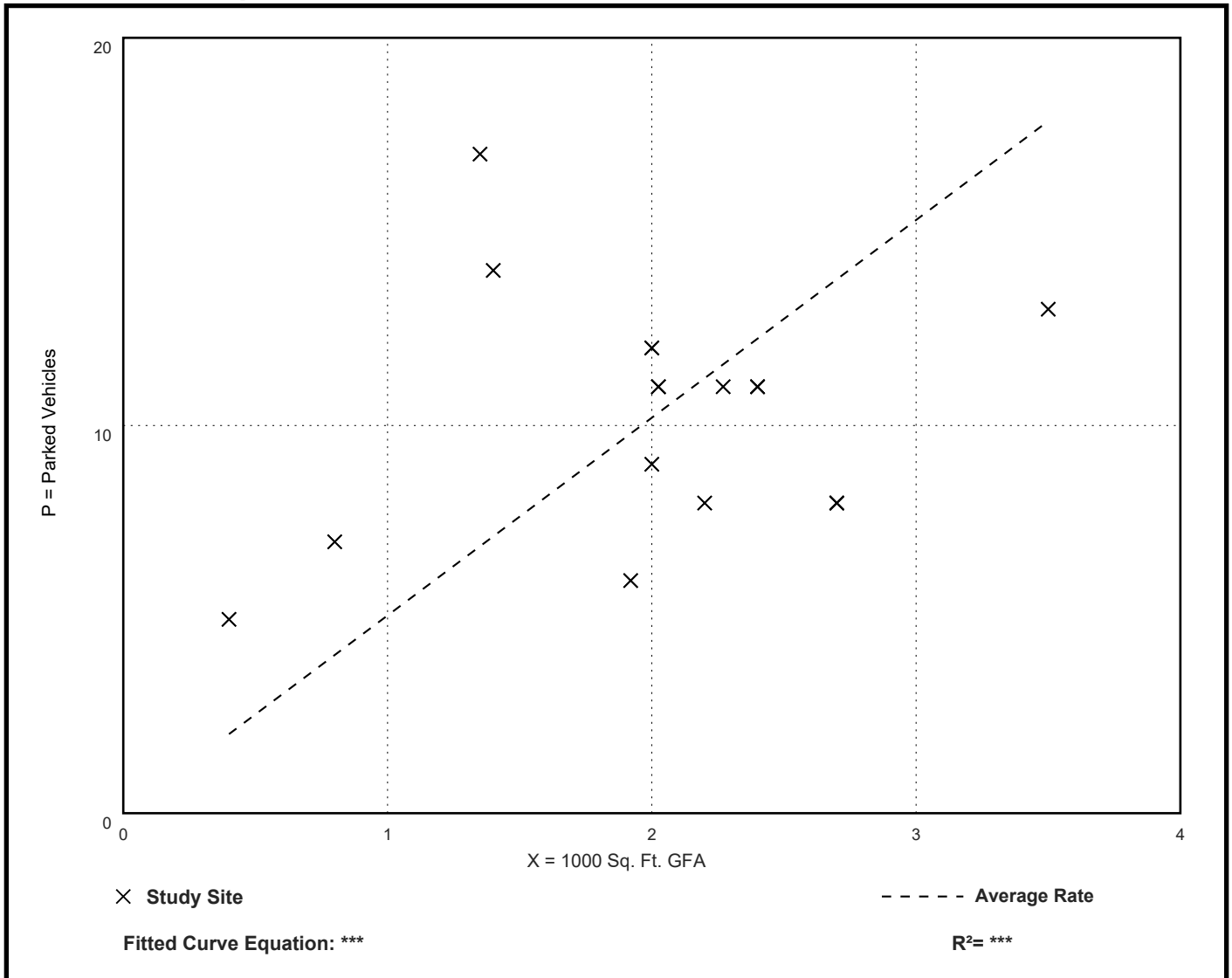
Number of Studies: 17

Avg. 1000 Sq. Ft. GFA: 2.0

## Peak Period Parking Demand per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
5.10	2.96 - 12.59	4.45 / 10.75	***	2.44 ( 48% )

## Data Plot and Equation



# Coffee/Donut Shop with Drive-Through Window (937)

Peak Period Parking Demand vs: 1000 Sq. Ft. GFA

On a: Saturday

Setting/Location: General Urban/Suburban

Number of Studies: 2

Avg. 1000 Sq. Ft. GFA: 1.3

## Peak Period Parking Demand per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
8.70	5.41 - 11.85	*** / ***	***	*** ( *** )

## Data Plot and Equation

Caution – Small Sample Size

