PLANNING COMMISSION
ZONING ORDINANCE REWRITE WORK SESSION
MOTION SHEET

Meeting Date: **JUNE 5, 2023**

Planning Commissioner: Eric Combs

Subject of Motion: **Reduced Parking Ratio for Attainable Housing**

Reference Location: 7.06.02 C. 1.

I MOVE: That Section 7.06.02 C.1. be revised as follows:

a. Reductions are determined by the number of attainable units regardless of bedroom type or Area Median Income (AMI) levels.
b. Parking may be reduced to 1.5 parking spaces per dwelling unit.
c. The site plan must show the number of attainable dwelling units.
d. Parking for attainable units must be included in the rental price.

2019 COMP PLAN POLICY SUPPORT:

- Housing Policy 3. Action C. "Develop zoning regulations and design standards that remove barriers and incentivize the development of housing affordable to households at or below 100percent AMI in all residential and mixed-use development." [This motion will greatly reduce the cost of building attainable housing.]

- Sub-Urban Policy Area Design Guidelines. Building Orientation and Setbacks. 1. "….Site design and development will strive to minimize site disturbance and minimize removal of existing, viable vegetation." [Reducing unneeded parking will reduce the removal of existing vegetation that otherwise would have been covered by asphalt.]

- Appendix A. General Place Type Considerations. 9. d. "How are impacts on water quality addressed?" [Reducing unneeded parking will reduce impervious surface, thus reducing storm water management and improving water quality.

DISCUSSION POINTS /JUSTIFICATIONS:

- The Institute of Transportation Engineers (ITE), based on 29 studies of over 4.600 Affordable Housing Units, has published in the 5th Edition of the Parking Generation Manual, that the Average Rate of Peak Period Parking Demand per [Affordable] Dwelling Unit is 0.99 parking spaces per dwelling unit.

- On May 5 & 6, 2020, Professional Engineers at Gorove Slade conducted a Parking Occupancy Summary at three of the largest ADU Projects in Loudoun County. They found, at the time of peak parking demand, that the Parking Rates (Spaces/DU) were 1.1; 1.2; and 1.4 with an Average of 1.2 Spaces/DU.

- Both ITE and Gorove Slade based their professional analysis on the number of affordable housing units in the apartment complex. To date, no analysis has been presented to the Planning Commission justifying a reduction in parking ratios base on Area Median Income (AMI) levels.

- A prior study of Resident Demographics at Heronview Apartments, one of the properties in the Gorove Slade study, found that 57% of households have only one single adult in the household. [In addition to low to very low levels of household income, this high number of single-resident households helps to explain the low level of automobile ownership at ADU properties.

- In a sample problem, applying the current Draft Zoning Ordinance language to a 100-unit 4% LIHTC Bond deal, it was found that the current Draft language will reduce required parking spaces from 200 to 174. However, applying the parking ratio of 1.5 spaces per Dwelling Unit, proposed here, will reduce the required parking spaces from 174 to 150—a savings of 24 parking spaces. Using standard industry assumptions for the cost to build parking spaces, the cost to buy land for parking spaces, and the cost to treat storm water coming off parking spaces, these 24 unneeded parking spaces added $635,000 ($6,350 per units) of unneeded cost to the attainable project.

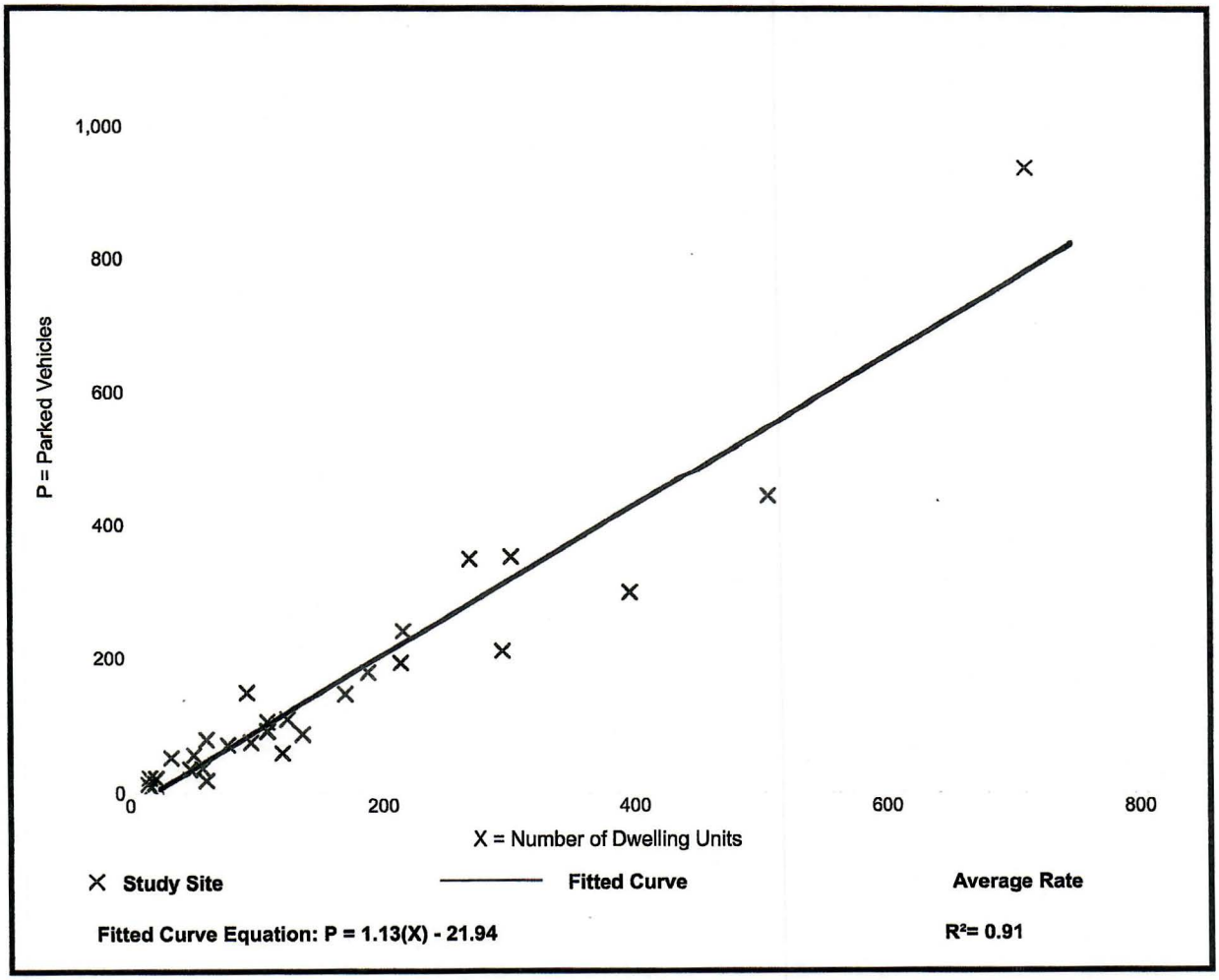
Affordable Housing - Income Limits
(223)

Peak Period Parking Demand vs: **Dwelling Units**
On a: **Weekday (Monday - Friday)**
Setting/Location: **General Urban/Suburban**
Peak Period of Parking Demand: **10:00 p.m. - 5:00 a.m.**
Number of Studies: 29
Avg. Num. of Dwelling Units: 159

Peak Period Parking Demand per Dwelling Unit

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
0.99	0.32 - 1.66	0.85 / 1.33	0.89 - 1.09	0.27 (27%)

Data Plot and Equation



Parking Generation Manual, 5th Edition • Institute of Transportation Engineers

GOROVE SLADE
Transportation Planners and Engineers

Technical Memorandum

To:	Town of Leesburg
From:	Tushar Awar, PE, PTOE Pulkit Parikh, PE, PTP Anushree Goradia
Date:	April 17, 2023
Subject:	Greenview at Oaklawn Parking Demand Memorandum

Introduction

This memorandum provides justification for a reduction in parking for the proposed Greenview at Oaklawn development in Town of Leesburg, Virginia. The overall Oaklawn site consists of an assemblage of parcels totaling approximately 96.41 acres and is located to the east of Dulles Greenway (Route 267) and to the north and south of Battlefield Parkway. The information provided in this memorandum pertains to the residential development (Greenview at Oaklawn) included in Landbay MUC-2 within the Oaklawn Development. Landbay MUC-2 is bound by Desmond Plz to the north, Miller Drive SE and Battlefield Parkway SE to the south, Brown Roan Drive SE to the west and Oaklwan Drive SE to the east, as shown in **Figure 1**.

The information in this memorandum supports the applicant's request to modify the parking requirements for the project's multi-family units to better align with the actual number of parking spaces required to serve residents of the proposed affordable dwelling units (ADUs). This memorandum summarizes parking occupancy observed on similar affordable housing sites as justification for this modification.

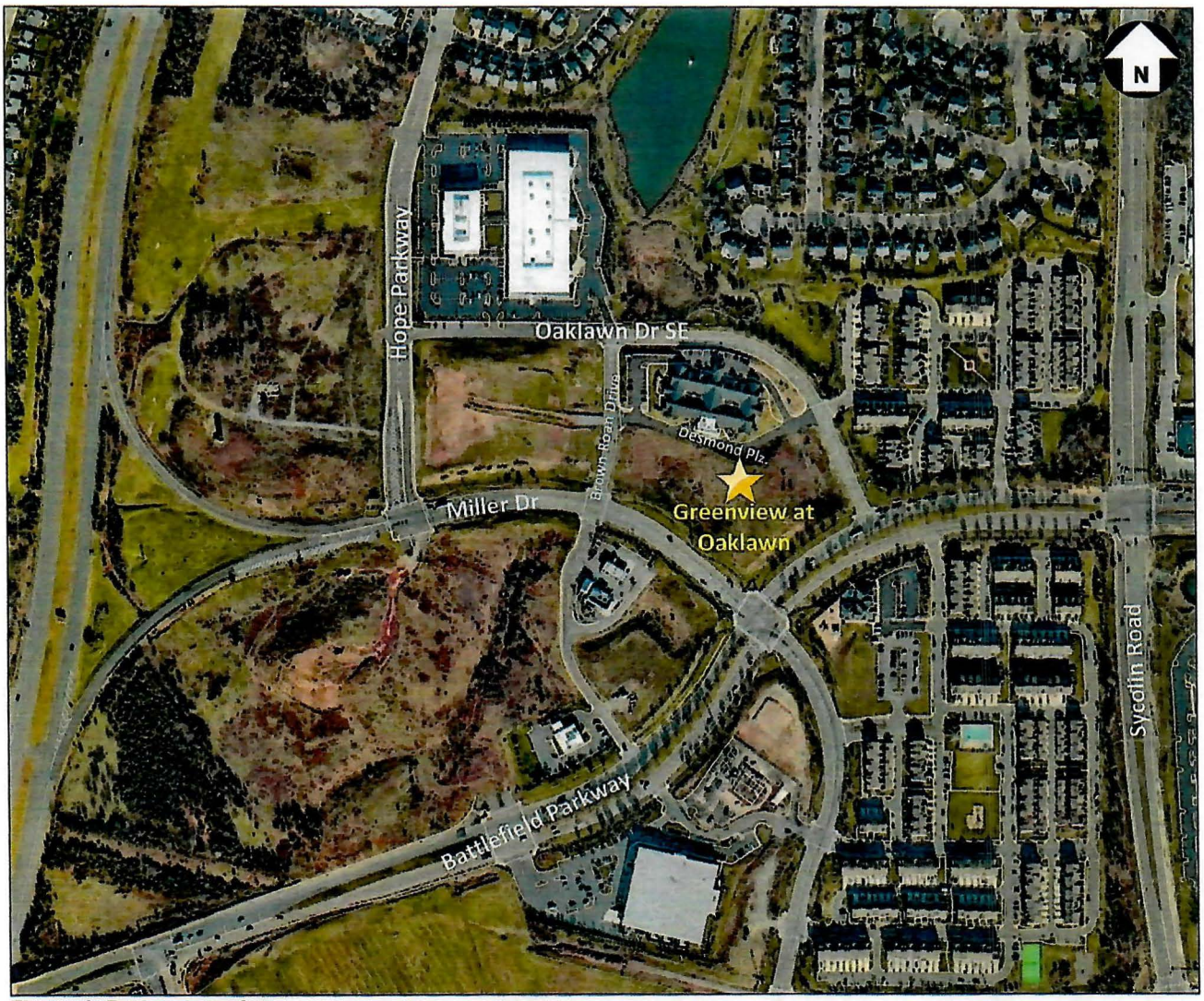


Figure 1: Project Location

Parking Requirements

Based on the current plan, the proposed Greenview at Oaklawn development consists of 184 affordable dwelling units. The affordable units are anticipated to include 52 one-bedroom units, 107 two-bedroom units and 25 three-bedroom. The zoning regulation of the Town of Leesburg Zoning Ordinance regarding the parking requirements and the requested modifications are shown in **Table 1.** As shown in **Table 1**, the number of parking spaces required by the Zoning Ordinance is 355 spaces.

However, the applicant is proposing to provide a parking rate of **1.5 space for all one, two and three bedroom units** making up a total of 278 spaces for the 184 affordable units on the proposed development.

Table 1: Required and Proposed Parking Rates/Spaces

Zoning Ordinance Section Reference	Residential Type	Number of Dwelling Unit	Zoning Regulation Rates		Proposed Rates	
			Zoning Regulation (per DU)	Number of Parking Spaces Required by Zoning Regulation	Requested Modification (per DU)	Number of Parking Spaces Required After Modification
Article 11: Section 11.3: Table 11.3	1 Bedroom	52	1.5	78	1.5	78
	2 Bedrooms	107	2.0	214	1.5	161
	3 or more Bedrooms	25	2.5	63	1.5	38
	Total	**184**	**1.93**	**355**	**1.5**	**277**

Zoning Modification Justification

Local Parking Demand Observations

This section presents a review of parking inventory and parking occupancy of similar existing affordable dwelling units (ADU) projects in Loudoun County, VA. The purpose of the survey was to determine the parking supply and demand on sites with similar uses.

Empirical data derived from existing ADU projects in Loudoun County indicates that the majority of residents of affordable units own one vehicle. This reduced amount of vehicle ownership is directly attributable to both the number of ADU households headed by a single person and the household income of ADU residents. Three similar existing ADU sites in Loudoun County that were surveyed in this memorandum include:

- Stone Springs Apartments
- Shreveport Ridge Apartments
- Heronview Apartments

The parking occupancy counts of these three sites were conducted on Tuesday, May 5, 2020, and Wednesday, May 6, 2020. Parking sweeps were conducted from 8:00 PM to 9:00 PM, which represents peak parking demand during typical weekdays. **Please note that based on discussions with the building owner for three sites noted above, it was also confirmed that all of these sites were fully occupied when the parking observations were conducted on these sites.** The results of the survey are summarized in **Table 2.**

Table 2: Parking Occupancy Summary of Existing ADU Projects

Project	Dwelling Units (DU)	Zoning Ordinance Requirement		Actual Usage			
		Parking Spaces	Parking Rate (Spaces/DU)	5-May		6-May	
				Parking Spaces	Parking Rate (Spaces/DU)	Parking Spaces	Parking Rate (Spaces/DU)
Stone Springs Apartments	128	267	2.1	145	1.1	143	1.1
Shreveport Ridge Apartments	98	223	2.3	140	1.4	135	1.4
Heronview Apartments	96	180	1.9	114	1.2	110	1.1
Average			**2.1**		**1.2**		**1.2**

As shown in **Table 2**, the parking demand of the studied ADU sites averaged at 1.2 spaces per dwelling unit, much lower than the required Zoning Ordinance rate (2.1 Spaces/DU) and lower than the requested parking rate (1.5 spaces/DU) for the Greenview at Oaklawn site.

Parking Demand Ratios from ITE Parking Generation Manual

For additional national context, a review of the recent published data on parking demand for affordable housing was conducted including ITE's Parking Generation, 5th Edition.

ITE Land Use Code 223 (Affordable Housing) demand ratio is 0.99 spaces per unit. This falls well below the Zoning Ordinance rate for market rate multi-family units and below the proposed parking rate of 1.5 spaces for affordable dwelling units.

Conclusions

This memorandum presents the results of a Parking Demand Study conducted for the proposed Greenview at Oaklawn Development site in Town of Leesburg, Virginia. The memorandum supports the following major conclusions:

- The Applicant is proposing to modify the parking ratio to **1.5 space for all the one, two and three-bedroom units** for the affordable multifamily units, which would result in **278 parking spaces** for the anticipated 184 affordable units.
- Parking occupancy data was collected on two days at 3 similar ADU sites in Loudoun County and was observed to have an average peak demand of 1.2 spaces/DU.
- It is also noted that ITE's Parking Generation Rate for Affordable Housing (ITE Code 223) is **0.99 space/DU**, even lower than the proposed reduced rate.
- Hence, the proposed modified average parking ratio of **1.5 space for one, two and three-bedroom units** which results in **278 spaces**, provides adequate parking available to accommodate the parking demand at this type of site.

HERONVIEW APARTMENTS
RESIDENT DEMOGRAPHICS
SEPTEMBER 2019

OVERVIEW

- 96 units
- 250 residents (147 adults / 103 minors under 18)

HOUSEHOLD MIX

- Single Adult – No minors 23%
- 2 Adults – No minors 17%
- Single Adult – with minors 34%

57% are Single Adult Households

- 2 Adults – with minors 26%
- 55% of minors live in single-parent households

ETHNICITY

- Caucasian (including Hispanic) 43%
- African-American 35%
- Asian-American 22%

HOUSEHOLD INCOME (annual)

- Low (Social Security) $20,000
- Average $39,400
- High (2 earners with minors) $62,000

EMPLOYMENT BY CATEGORY - 96% employed (only 4% receiving any rental assistance)

Retail, Sales, Hospitality 29
Retail – 4
Cashier - 5
Sales – 10
Food – 6
Bartender - 4

Educators 12
Teachers - 12

Drivers and Mechanics 15
Drivers - 8
CDL Drivers – 1
Mechanic – 5
Parts specialist - 1

Construction 1
HVAC helper

Medical Professionals 9
Dental Assistant - 3
Orthodontic Assistant – 1
Radiology Assistant – 1
Pharmacy – 1
Personal Care Assistant – 2
Equipment technician – 1

Business and Government 27
Office Assistant – 4
Receptionist - 6
Auto Finance Work – 1
IT workers – 8
Security Officer – 4
TSA Officer – 1
Clerk – 2
Property Manager - 1

Miscellaneous 11
Cleaner – 3
Toll Booth Worker – 1
Self-employed – 1
Personal trainer – 1
Caseworker – 1
Counselor – 1
Residential Counselor – 1
Customer service – 2

Retired 3

TOTAL 104 JOBS FILLED

ADU/AHU Parking Ratio Reduction

Sample Problem for Illustration:

- 100-unit LIHTC Project under the 4% Bond Program in the Sub-Urban Policy Area.
- Required Parking Spaces (before reduction) from Parking Table 1.:
  - 20% 1-BR units = 20 units x 1.5 spaces/DU = 30 spaces
  - 60% 2-BR units = 60 units x 2.0 spaces/DU = 120 spaces
  - 20% 3-BR units = 20 units x 2.5 spaces/DU = 50 spaces

  Total Parking Spaces Required : 200 spaces (avg 2.0/DU)
- Current Proposed Reduction:
  - 8 units at 30% AMI x 2 spaces/DU = 16 x 50% reduction = 8 spaces
  - 92 units at 60% AMI x 2 spaces/DU = 184 x 10% reduction = 18 spaces

  Total Parking Space Reduction : 26 spaces

  Net Parking Spaces Required : 174 (avg 1.74/DU)
- Industry Proposed Alternative:
  - 100 units x 1.5 required Parking Spaces/DU = 150 spaces (avg 1.5/DU)

  Net Unneeded Parking Spaces: 24

Added Cost of Unneeded Parking Spaces:

- Cost to Build Unneeded Parking Spaces:
  - Assume half surface parked = 12 spaces x $10,000/space = $120,000
  - Half structured parked = 12 spaces x $30,000/space = $360,000

  Funds Wasted to Build Unneeded Spaces: $480,000

- Cost to Buy Land for Unneeded Parking Spaces:
  - Assume 24 spaces will require about 0.20 Acre of land.
  - Assume cost of land at about $700,000/acre (Discounted price for ADUs/AHUs).

  Funds Wasted to Buy Land for Unneeded Spaces: $140,000

- Cost to Treat Added Storm Water Runoff:
  - Assume an added 0.2 acre of impermeable surface will add to cost of Storm Water management and Treatment system
  - Assume added grading, pipe, and treatment at $15,000.

  Funds Wasted on Assed Storm Water Management: $15,000

Total Funds Wasted on Unneeded Parking Spaces: $635,000

(Adds about $6,350/unit to cost of project.)