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**Project name: Bluebird Village Affordable
Housing Parking Study**

Project ref: 60654270

To: Greg Dunfield – GMD Development

From: Kordel Braley, PE, PTOE

Date: March 9, 2021

Memo

Subject: Ketchum Bluebird Village Housing Parking Study

Background

On behalf of GMD Development, AECOM has conducted this parking study for a proposed 56-unit affordable housing complex to be constructed within the block bordered by East Ave, Alpine Lane, 5th Street, and 4th Street/Sun Valley Trail in Ketchum, Idaho. The purpose of this parking study is to provide an estimate of the off-site parking demand of the current use (city hall) as well as the proposed use (affordable housing).

Based on the analysis provided in this study, the proposed development is not anticipated to have an adverse effect on on-street parking; instead it is anticipated to alleviate parking demand during peak periods. The addition of affordable housing in the downtown core could also decrease commuting trips in and out of Ketchum.

Existing Conditions

The City of Ketchum's city hall is currently located on the project site and would be replaced with the proposed development. According to data provided by the city, the building houses 15 city employees during normal business hours plus additional emergency service personnel as follows:

- Fire Department:
 - 2 Command Staff (daytime)
 - 3 Firefighters (24/7)
- Police Department:
 - 2 Police Officers and 1 Admin (daytime)
 - 2 Police Officers (24/7)

During the daytime, a total of 25 city employees can be on-site at any given time. An additional 2 walk-up patrons can also be expected at any given time. However, it's estimated that at least

4 employees may use alternate forms of transportation (bus, walking, biking, or being dropped off). The total existing peak parking demand is therefore estimated to be approximately 23 vehicles. No on-site parking is provided, so all employees and visitors that drive use on-street parking.

Proposed Conditions

According to the development team, the proposed Bluebird Village development will have 56 units that are a variety of sizes ranging from one-bedroom to three bedrooms per unit. The total number of bedrooms is 82. A total of 49 on-site parking stalls will be provided (see site plan in Appendix A). Additional travel demand management amenities include secured bike storage, an on-site vehicle share program (two vehicles), and electric bike charging stations. Furthermore, the project's location in downtown Ketchum in close proximity to retail, employment, recreation, and transit (Mountain Rides) access is likely to reduce the need for dependence on vehicle ownership and use.

Parking demand was estimated using parking rates obtained from the most recent edition of Institute of Transportation Engineers (ITE) *Parking Generation Manual*, 5th Edition (2019). The most applicable land use code is "Affordable Housing – Income Limits" (ITE Land Use Code 223).¹ Parking demand was calculated using both total units and total bedrooms as the independent variable.

Using units as the independent variable, the average parking demand ranges between 41 and 55 vehicles depending on whether the average rate or a fitted curve equation is used. Using bedrooms as the independent variable, the average parking demand ranges between 44 and 45 vehicles depending on whether the average rate or a fitted curve equation is used (see parking demand calculations in Appendix B). Based on the ITE data, the 95% Confidence Interval of average parking demand per unit is between 0.89 and 1.09 which equates to 50 to 61 vehicles. In summary, the Bluebird Village development is likely to generate the need to accommodate 44 to 61 parked cars.

With 49 on-site parking stalls provided, the number of cars not able to be accommodated on site could range from 0 to 12. Given the project's travel demand management amenities and downtown location, this estimate is likely on the conservatively high side.

While specific off-site traffic impacts were beyond the scope of this parking study, the addition of affordable housing in downtown Ketchum should decrease commuting trips in and out of the city from other nearby communities as many jobs will be within walking distance of the proposed affordable housing.

Other Affordable Housing Projects in Ketchum

Based on information provided by the development team, the only other affordable housing project in Ketchum is Northwood Place, which includes 32 units (with 58 bedrooms) and 32 parking stalls. Currently, only 27 of the of the renters own vehicles (84%), although it is unknown if any renters own multiple vehicles. This parking review study utilizes an 89% vehicle parking

¹ ITE's description of this land use is as follows: "Affordable housing includes all multifamily housing that is rented at below market rate to households that include at least one employed member. Eligibility to live in affordable housing can be a function of limited household income and resident age."

demand per unit, which is more conservative than the comparable 84% observed at the Northwood Place development.

Key Findings

The existing peak off-site parking demand for city hall likely exceeds 20 vehicles. The proposed housing development will likely generate 0 to 12 off-site parked vehicles. Therefore, the proposed development will decrease the net on-street parking demand. The existing use utilizes on-street parking primarily during the daytime, whereas the peak parking demand for the residential use will occur overnight. Therefore, fewer parked cars will be observed during the daytime, but more parked cars will be observed in the overnight hours. An inventory of the existing on-street parking supply within walking distance of the proposed project was not included in the scope of this parking study. However, given the retail nature of nearby uses, the proposed change in land use is expected to decrease parking demand when the nearby retail uses utilize more parking, and increase on-street parking demand when the nearby retail uses are utilizing less on-street parking.

The proposed development is not anticipated to have an adverse effect on on-street parking; instead it is anticipated to alleviate parking demand during peak periods. The addition of affordable housing in the downtown core could also decrease commuting trips in and out of Ketchum.

APPENDIX A: Site Plan

APPENDIX B: Parking Demand Calculations

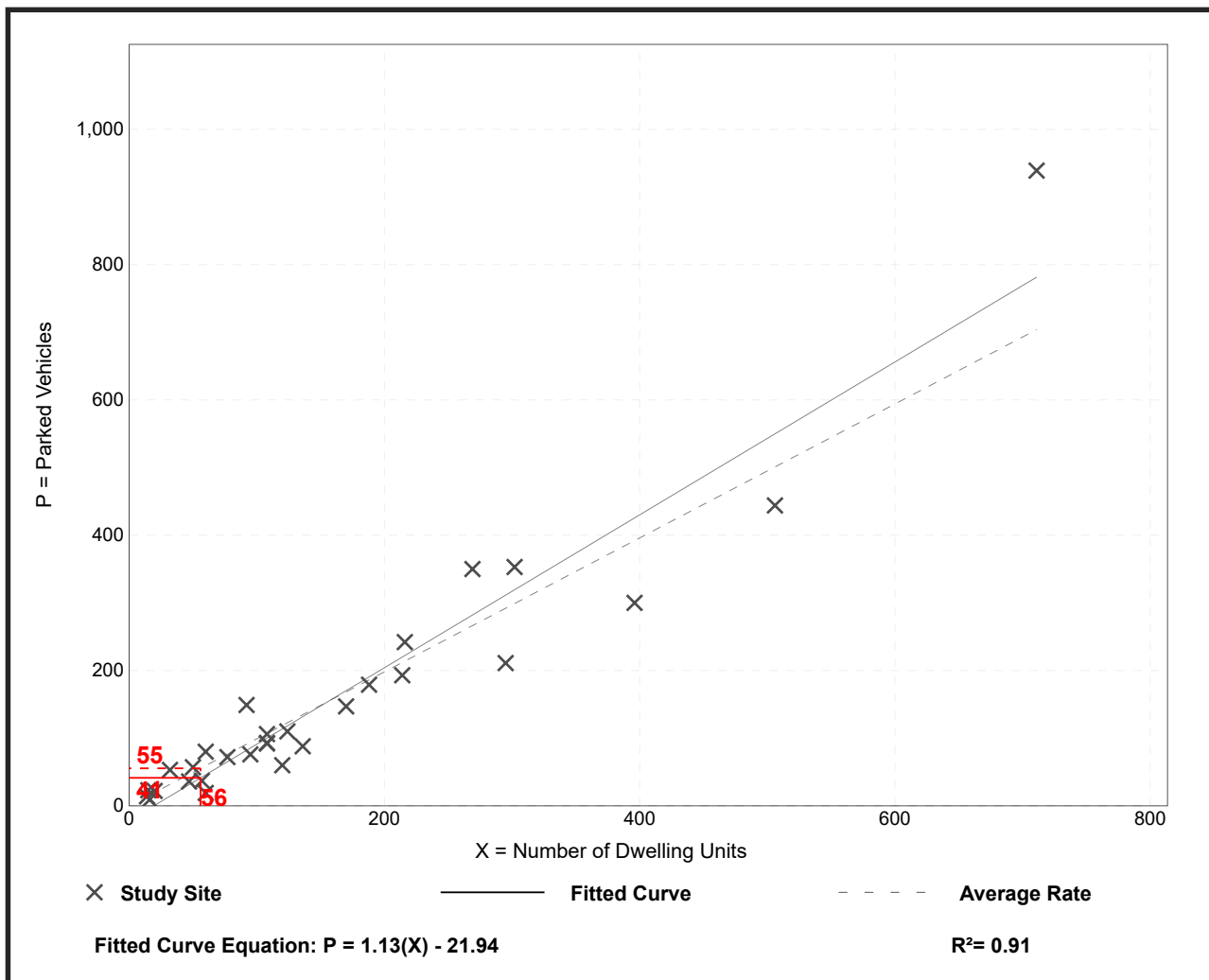
Affordable Housing - Income Limits (223)

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

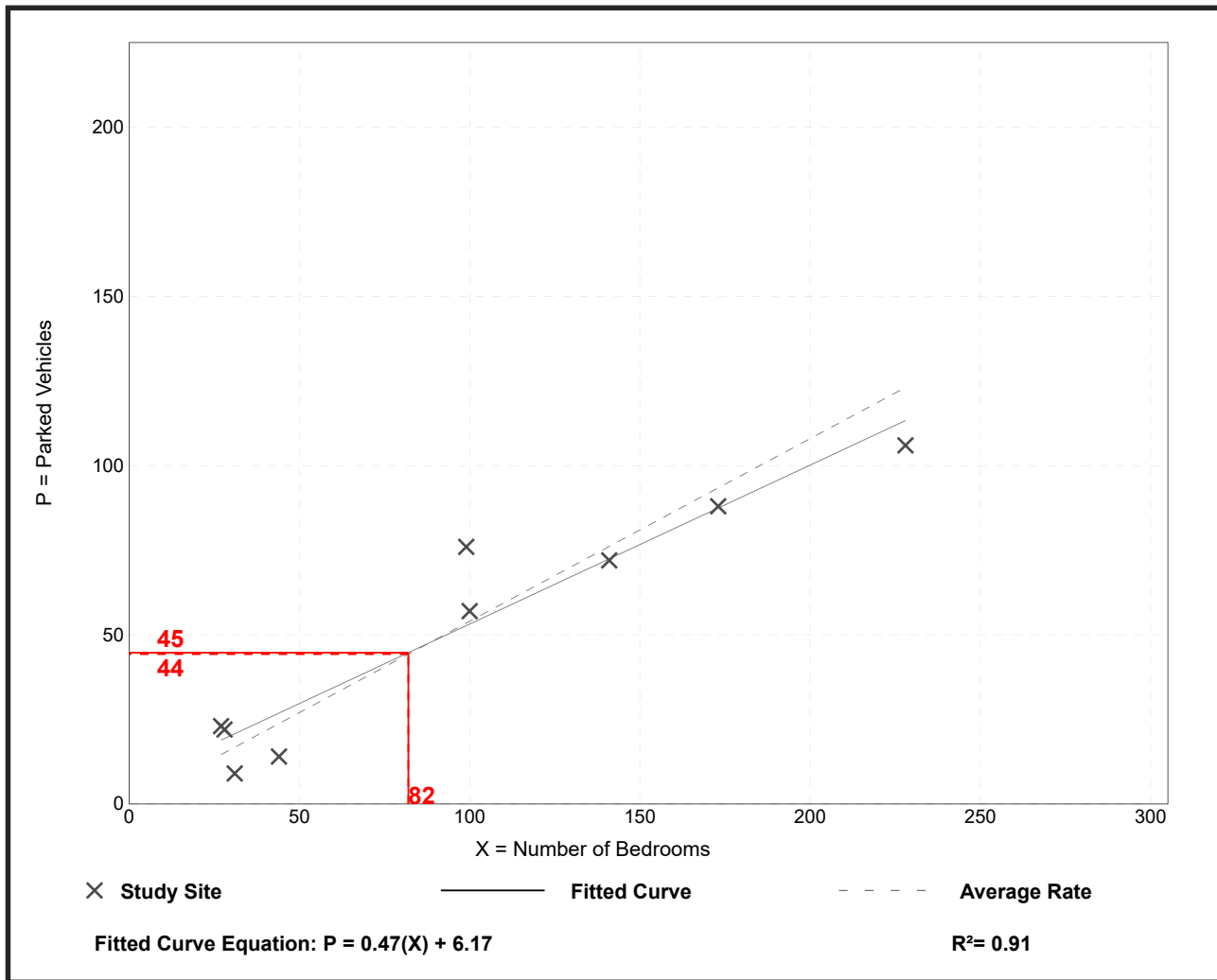
Affordable Housing - Income Limits (223)

Peak Period Parking Demand vs: Bedrooms
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: 9
 Avg. Num. of Bedrooms: 97

Peak Period Parking Demand per Bedroom

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
0.54	0.29 - 0.85	0.48 / 0.82	***	0.14 (26%)

Data Plot and Equation



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