ATTACHMENT 7

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NELSON
NYGAARD

MEMORANDUM

To: Serena Ip, Matthew Lewis

From: Ria Hutabarat Lo

Date: January 15, 2016

Subject: Edwina Benner Plaza Parking Demand Analysis

Nelson\Nygaard was hired by MidPen Housing to analyze likely parking demand associated with the proposed Edwina Benner Plaza affordable housing development.

THE PROJECT

Edwina Benner Plaza is proposed for development at 460 Persian Drive, Sunnyvale. The development would be a 100% affordable multifamily housing development with a 66 dwelling units in 4-stories of residential space over a podium garage containing 87 parking spaces.

The proposed parking ratio is 1.3 spaces per unit, which is equivalent to a parking ratio or 1 space per unit for the one- and two-bedroom units and 2 spaces per unit for three-bedroom units in addition to three staff spaces. Parking includes 3 accessible spaces, 50 single-car stalls, and 34 tandem spaces (17 tandem pairs). Tandem spaces will be reserved for 3-bedroom units.

Transit Orientation

The proposed development has unobstructed access to Fair Oaks VTA light rail station, which is located 0.4 miles from the site.

VTA operates light rail services from Fair Oaks station between Mountain View and Winchester at 15 minute headways during the peak and 30 minutes during off-peak times. VTA route 26 also operates at 30 minute headways, and route 55 provides access to De Anza College at 30 minute headways.

These services provide moderate transit access in an area that is shifting toward improved transit access and more transit-oriented development.

Table 1: Commuter Transit Service Available nearby Proposed Site

Service	Route	Destination	Peak hour headway (min)	Off peak midday headway (min)
VTA LRT	902	Mountain View - Winchester	15	30
VTA Bus	26	Lockheed Martin – Eastridge Mall	30	30
	55	DeAnza College – Great America	30	30

Affordable Housing

The proposed development includes 100% affordable housing. Based on information from the GreenTRIP database, afforable housing is associated with lower rates of parking utilization than market rate housing.[1]

Assembly Bill 744, which was approved on October 9, 2015, recognizes the lower parking demand associated with affordable housing developments. It also prohibits cities from imposing a parking ratio in excess of 0.5 spaces per bedroom for developments that include the maximum percentage of low- or very low income units, and that are located within an unobstructed 1/2 mile walk of a major transit stop (such as an existing rail transit station or the intersection of two bus routes with peak hour headways of of 15 minutes or less).[2]

Land Use Mix

The proposed development is within an Industrial to Residential Overlay District (ITR) and is subject to the Fair Oaks Junction Sense of Place Plan.[3] Based on this designation and plan, land uses, building form, urban design and non-motorized transportation networks are transitioning to a more walkable, human-scaled, and transit-oriented conditions.

Along with the light rail station, grocery, restaurant, and other retail services are available nearby within 0.5 miles of the proposed development, so there is an opportunity for residents to walk to these services. Combined with the affordable character of the development, this mix of locally accessible uses in proximity to a transit node is supportive of transit-oriented development and lifestyles that enable lower rates of care ownership and use.

PARKING DEMAND AT COMPARABLE SITES

In order to estimate the parking demand at the proposed Edwina Benner Plaza development, Nelson\Nygaard collected data on parking occupancy at comparable sites in the area. This data included surveys of parking utilization at nearby sites, as well as publically available information from previous parking utilization surveys for transit-oriented residential developments in the Bay Area.

Current Parking Utilization in the Area

Peak parking utilization counts were taken at comparable sites in Sunnyvale. Nelson\Nygaard conducted overnight parking surveys between 8 p.m. and 10 p.m. at two sites on Tuesday October 27, 2015. This time period was chosen because it represents the period of peak residential parking demand.

Sites surveyed included Aster Park at 1059 Reed Street, Sunnyvale, and Garland Plaza at 622 Garland Avenue, Sunnyvale. These sites were chosen based on their proximity to comparable

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[1] TransForm, GreenTRIP Parking Database http://database.greentrip.org/

[2] Assembly Bill 744 http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160AB744. See also Public Resources Code § 21064.3 for definition of major transit station.

[3] City of Sunnyvale, Fair Oaks Junction Sense of Place Plan, http://sunnyvale.ca.gov/Portals/0/Sunnyvale/CDD/Residential/Developments/Fair%20Oaks%20Junction%20Sense%20of%20Place%20Plan%20FINAL%208-8-12.pdf

transit services, comparable housing mix (affordable housing), and the ability of surveyors to gain access the parking facilities.

The site characteristics and parking demand measured at each site are provided in Table 2 along with characteristics of the proposed development.

Table 2: Site Characteristics and Parking Demand at Proposed Development and Comparable Sites

Quantity	Proposed at Edwina Benner Plaza	Aster Park	Garland Plaza
Site Characteristics			
Year built	2016/17	1975	1959 (recent renovation)
Distance from major transit stop (miles)	0.4 (VTA LRT, 26, 55)	0.5 (Lawrence Caltrain)	0.3 (VTA route 522/22)
Dwelling Units	66	95	20
Bedrooms	119	227	35
Average Bedrooms per Unit	1.8 (30 1-BR, 19 2_BR, 17 3-BR)	2.3 (12 1-BR, 42 2-BR, 33 3-BR, 8 4-BR)	1.8 (11 1-BR, 3 2-BR, 6 3-BR)
Affordable	100%	59%	100%
Off-Street Parking Supply (spaces)	87	155	20
Tandem spaces	34 (17 pairs)	0	0
Numbered spaced		16 (80%)	60 (39%)
Parking Ratio (spaces/unit)	**1.3**	1.6	1.0
Parking Ratio (spaces/bedroom)	**0.73**	0.68	0.65
Parking Utilization Survey	-	9:30 p.m. Tues 10/27/2015	9 p.m. Tues 10/27/2015
Peak demand (spaces)	-	108	10
Peak demand (spaces/unit)	-	**1.14**	**0.50**
Peak demand (spaces/bedroom)	-	**0.48**	**0.29**
Percent empty spaces at peak		**25%**	**50%**

As can be seen in the above table, the comparable developments currently have between 25 to 50 percent of parking spaces that remain empty even at peak times. Actual peak utilization is in the range of 0.5 to 1.1 spaces per unit or 0.3 to 0.5 spaces per bedroom.

At the same time, however, there is an apparent parking spillover to on-street spaces. The limited number of non-accessible spaces adjacent to both Aster Park and Garland Plaza were fully occupied at the time of observation; while blue accessible spaces adjacent and internal to Aster Park were unoccupied. Higher utilizations rates (and therefore more efficient use of parking facilities) were apparent at Aster Park where a smaller proportion of spaces were numbered.

It should be noted that parking spillover cannot be solely attributed to the developments under analysis, since it is a public resource for the entire neighborhood. Additionally, a large multilevel

parking structure associated with the neighboring medical facility was located immediately opposite the Garland Plaza development, and this structure was almost completely empty during the observed period of peak residential parking. A lack of on-street parking amid conditions of underutilized off-street spaces may highlight a lack of parking demand management strategies such as unbundled parking and areawide shared parking, which results in inefficient use of the parking facilities that are available. At Garland Plaza the large number (24) of bicycles parked against a well-located bicycle rack (with capacity for about 12) could suggest that residents in this location are able to meet some of their daily needs using alternative modes of transportation.

OTHER RESEARCH ON RESIDENTIAL PARKING UTILIZATION

In order to provide further context regarding parking demand, Nelson\Nygaard considered results from previous studies of parking demand at transit-oriented residential developments within the Bay Area. For this analysis we focused on other affordable housing developments located in close proximity (less than 0.5 miles) to comparable transit services

Previous research indicates that municipal requirements for minimum parking ratios generally result in an oversupply of parking at transit-oriented development sites within the Bay Area.[4] Cervero, Adkins and Sullivan found that parking demand increases with walking distance to transit and transit headways. Therefore, requirements that are mandated across an entire city will result in an oversupply of parking at locations in close proximity to high frequency regional transit services. In Santa Clara County, Salazar et al. found that about 26% of available parking spaces were unused for residential developments with free parking in close proximity of Caltrain or VTA light rail stations.[5] The GreenTRIP parking database also indicates that even lower parking utilization rates are associated with housing that features travel demand management (TDM) strategies such as unbundled parking, transit pass programs, and affordable housing.

All three of the above studies recommend simplifying municipal parking requirements to require lower parking supply ratios in near frequent, high-capacity transit service. Relevant results from the studies are presented in Table 3, along with the parking survey results discussed previously.

Table 3: Parking Supply and Demand Ratios at Comparable Sites (Nelson\Nygaard Surveys in boldface)

Station	Afford-able	Parking Supply (space/ unit)	Peak demand (space/ unit)	Peak demand (space/ bedroom)	Parking Over-supply (%)	Source
"No. 6", Fair Oaks Station, Sunnyvale,	-	1.7	1.4	-	17%	Salazar, 2010
Aster Park, 1059 Reed Ave, Sunnyvale	59%	0.66	1.14	0.48	25%	Nelson\Nygaard, 2015
			1.34	0.58	15%	GreenTRIP, 2014
Garland Plaza, 622 Garland Ave, Sunnyvale	100%	1.00	0.50	0.29	50%	Nelson\Nygaard, 2015
Madera Apartments, 455 W Evelyn St, Mountain View	3%	1.37	0.88	0.62	36%	GreenTRIP, 2014

[4] Cervero, Robert, Arlie Adkins, and Cathleen Sullivan. "Are Suburban TODs Over-Parked?." *Journal of Public Transportation* 13.2 (2010): 3.

[5] Salazar, Dayana et al. *Parking Utilizaton Survey of Transit-Oriented Development Residential Properties in Santa Clara County*, San José State University and Santa Clara Valley Transportation Authority, 2010.

Peninsula Station, S El Camino Real, San Mateo	99%	1.56	1.47	0.58	6%	GreenTRIP, 2014
Betty Anne Gardens, 945 Lundy Ave, San Jose	100%	1.35	0.89	0.49	34%	GreenTRIP, 2013
Cottonwood Place, 3701 Peralta Blvd, Fremont	100%	1.12	0.41	0.38	64%	GreenTRIP, 2013
Delaware Pacific, 1990 S Delaware St, San Mateo	100%	1.48	1.28	0.63	13%	GreenTRIP, 2014

The results of Cervero et al., Salazar et al. and the GreenTRIP analysis coincide with the results of the surveys conducted by Nelson\Nygaard, which suggested a substantial parking oversupply. Comparable housing developments within the Bay Area within walking distance of high quality transit service had peak parking utilization ratios of 0.4 to 1.5 occupied spaces per unit or 0.3 to 0.6 spaces per bedroom.

CONCLUSIONS

1. Adequacy of On-Site Parking Supply

The proposed development at Edwina Benner Plaza is associated with a parking ratio of 1.3 space per unit or 0.73 spaces per bedroom.

Based on actual demand for residential parking in comparable sites, this level of parking provision will be adequate to address typical peak residential parking demand. Current parking demand at comparable sites suggested that most comparable housing development have a substantial number of spaces that remain empty even at the peak times. Typical peak parking demand falls into the range of 0.5 to 1.1 spaces per unit or 0.3 to 0.5 spaces per bedroom.

2. Compatibility with Transit-Oriented Development

The location of the proposed development suggests that below average parking demand (relative to citywide rates) can be expected. A parking variance to reduce the parking ratio in this location is recommended as part of a strategy of encouraging pedestrian activity and transit ridership around the light rail station. Lower rates of parking supply are compatible and supportive of transit and are associated with lower rates of trip making and development-related traffic congestion.

3. Compliance with AB 774

Finally, the reduced parking count is in keeping with AB 774, a newly-passed state law that is premised on the idea that fewer parking spaces are needed for affordable housing near transit. AB 744 amends the state Density law, and under its provisions, the maximum required parking spaces can only be 0.5 per unit for an affordable housing project within an unobstructed 0.5 mile walk of a high quality transit station, which is defined as having 15 minute headways or less at peak hours. Edwina Benner Plaza qualifies for a parking reduction under AB 744 because of its proximity to the Fair Oaks VTA light rail stop, which has 15-minute headways at peak hours. The proposed parking count exceeds the maximum under AB 744 in order to satisfy resident demand,

but the law mandates that the City conduct a parking study in order to require a higher count at a qualifying project.

4. Guest Parking

As outlined in AB 774, lower parking utilization rates can be expected at affordable housing developments. This means that there may be several units for which the tenant does not require assigned parking. Data from the Housing Authority waiting list indicates that approximately 50 percent of the heads of households for the 33 units that will be supported by Section 8 are likely to be seniors or people with disabilities. These sixteen units in particular are less likely to need a parking space (or a second parking space). Conservatively assuming that there are at least five (5) unassigned tenant spaces in addition to the three (3) spaces staff spaces, this would allow for a minimum of eight (8) guest spaces during peak parking periods. Temporary guest passes may be administered for use in these spaces.