MEMO

Community & Economic Development Department

DATE: 01/29/2020

TO: PLANNING COMMISSION

FROM: COMMUNITY AND ECONOMIC DEVELOPMENT DEPARTMENT – PLANNING DIVISION

SUBJECT: PUBLIC HEARING ITEM NO. 2 – PLANNING CASES P19-0507(CUP) AND P19-0508 (DR) – ADDITIONAL INFORMATION NOT AVAILABLE AT TIME OF PUBLICATION

On January 29, 2019, the attached Memorandum was provided by the City of Riverside Traffic Division of Public Works regarding the above referenced public hearing item (Planning Cases P19-0507 (CUP) and P19-0508 (DR).

Staff has supplemented the posted agenda for the February 6, 2020, Planning Commission meeting with a Supplemental Agenda and attached memo. The information, which was not available at the time of posting, is made available pursuant to Section 4.05.050.B.3 of the Riverside Municipal Code.

Exhibits

1. City of Riverside Traffic Division Memo

MEMORANDUM

DATE: 1/28/2020
TO: City Planner Mary Kopaskie-Brown, AICP, MCIP, OPPI
FROM: City Traffic Engineer Nathan Mustafa, PE, TE, AICP
CC: Vital Patel, Veronica Hernandez, Candice Assadzadeh
RE: P19-0507 (CUP) AND P19-0508 (DR)
St. Michael's Community Housing Traffic Memorandum

This memorandum is regarding the St. Michael's Community Housing Project, which is scheduled for public hearing under Planning cases P19-0507 & P19-0508 during the February 6th meeting of the Planning Commission. Prior to this Planning Commission date, several residents have spoken during the public comment portion of meetings held within the Art Pick – City Council Chamber and have expressed concern with perceived potential traffic impacts associated with the project.

Because a Traffic Impact Analysis was not required of the project pursuant to standard operating procedures that will be further detailed within this memorandum, Traffic Engineering has completed a traffic assessment to address neighborhood concerns. Given the scheduling of Traffic Engineering's field review on 1/28/2020, this memorandum represents new information not available at the time of publication for the P19-0507 & P19-0508 staff report(s).

RESIDENT CONCERNS:

- The housing will add traffic to the roadway system
- Vehicles traveling to & from the housing will add to delays experienced at Kingsbury & California and Hawthorne & Jackson
- The housing will generate parking demand and make it difficult to park on-street

VEHICLE TRIP GENERATION:

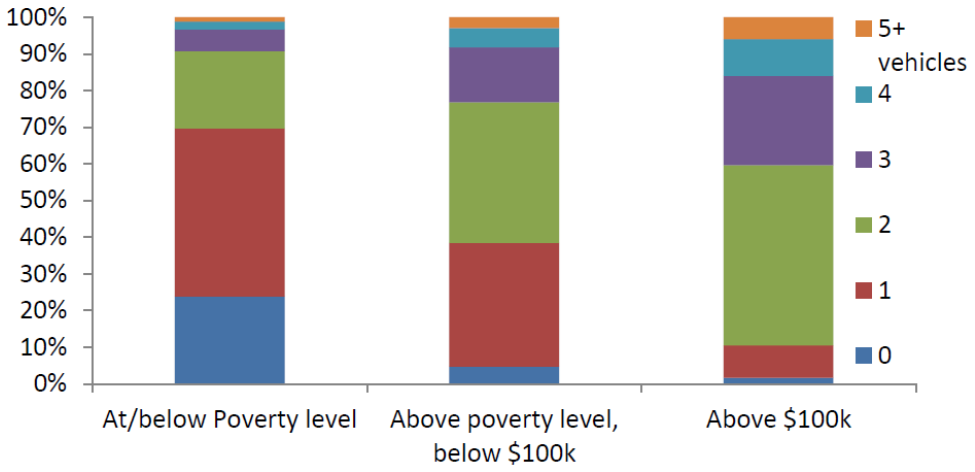
The proposed project consists of 50 affordable and permanent supportive housing units (including one manager's unit), an existing 6,300 square foot church to remain, a 4,214 SF Parish Hall, a 2,950 SF Friary & Chapel, and a greenhouse. Pursuant to current Traffic Impact Analysis Preparation Guidelines, a traffic impact analysis was not required for the project in accordance with the following general exemptions for analysis:

1. The estimated trip generation falls below 100 vehicles per hour (trip generation refers to the rate & number of vehicles traveling to and from a development)
2. Apartments and other Multiple Family projects of 75 units or less
3. Staff may request a small-scale analysis for sites generating between 50 and 100 peak hour trips.

Use of current Institute of Transportation Engineers' Trip Generation Manual reveals that the proposed additional Parish Hall would generate only 1-2 vehicle trips per peak hour of traffic on a typical weekday [ITE Land Use Code 560] – which means that the majority of vehicle trips for the project would be associated with the proposed housing.

Data published by the Federal Highway Administration (FHWA) in its 2014 report, "Mobility Challenges for Households in Poverty" suggests that households qualifying for affordable housing will likely own fewer vehicles per household (see below):

Fig. 3 Distribution of Number of HH Vehicles



The FHWA data suggests that the Trip Generation estimated for an affordable housing development may be reduced as a result of a lowered rate of vehicle ownership. Current data available through the Institute of Transportation Engineers (ITE) does not reflect alternative trip generation rates by income category, nor does it contain data specific to Riverside. For these reasons, the trip generation assessment for the site was prepared using several methods:

1. ***Traditional ITE Trip Generation for Multi-Family Housing***

   The most typical method for calculating estimated generated trips. Does not reflect motorists using on-street parking.

2. ***Affordable Housing Trip Generation Rates***

   ITE Trip Generation rates adjusted using findings developed by Portland State University through research grant funding provided by the State Department of Transportation (Caltrans) and Federal Highway Administration. (Report CA18-2465) Does not reflect motorists using on-street parking.

   As can be seen below, the anticipated number of vehicle trips per household in

multifamily housing is significantly reduced for Extremely Low-Income and Low-Income households.

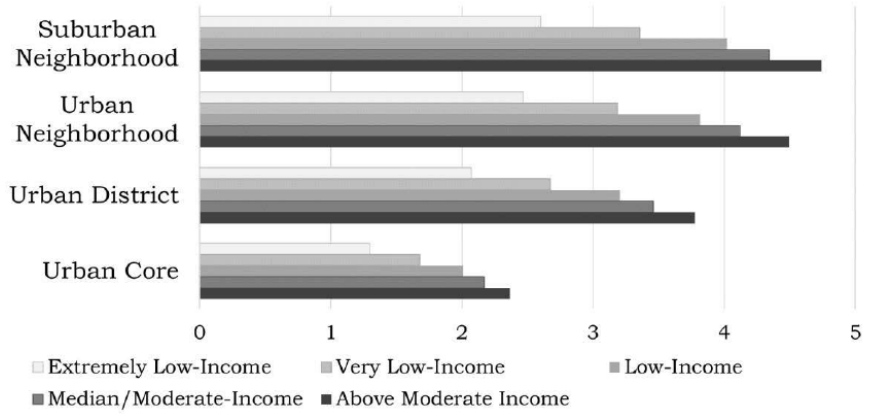


Figure 10 Number of home-based vehicle trips for households living in multifamily housing

3. *Local Data – Affordable Housing Trip Generation Measurements*

Rates developed using measurements of the Homefront at Camp Anza, including measurements of vehicles using nearby on-street parking **to generate a more conservative count**. For this 30-unit development, 23 vehicles were counted during the AM Peak Hour of Traffic, and similarly 23 vehicles were counted during the PM Peak Hour of Traffic. The number of vehicles measured per unit (all 30 were occupied at the time of study) was translated to a rate that was then applied to the 50-unit St Michael's project. Residents at the Homefront fall within the 'Very Low Income' bracket defined in the above referenced Caltrans-funded study.

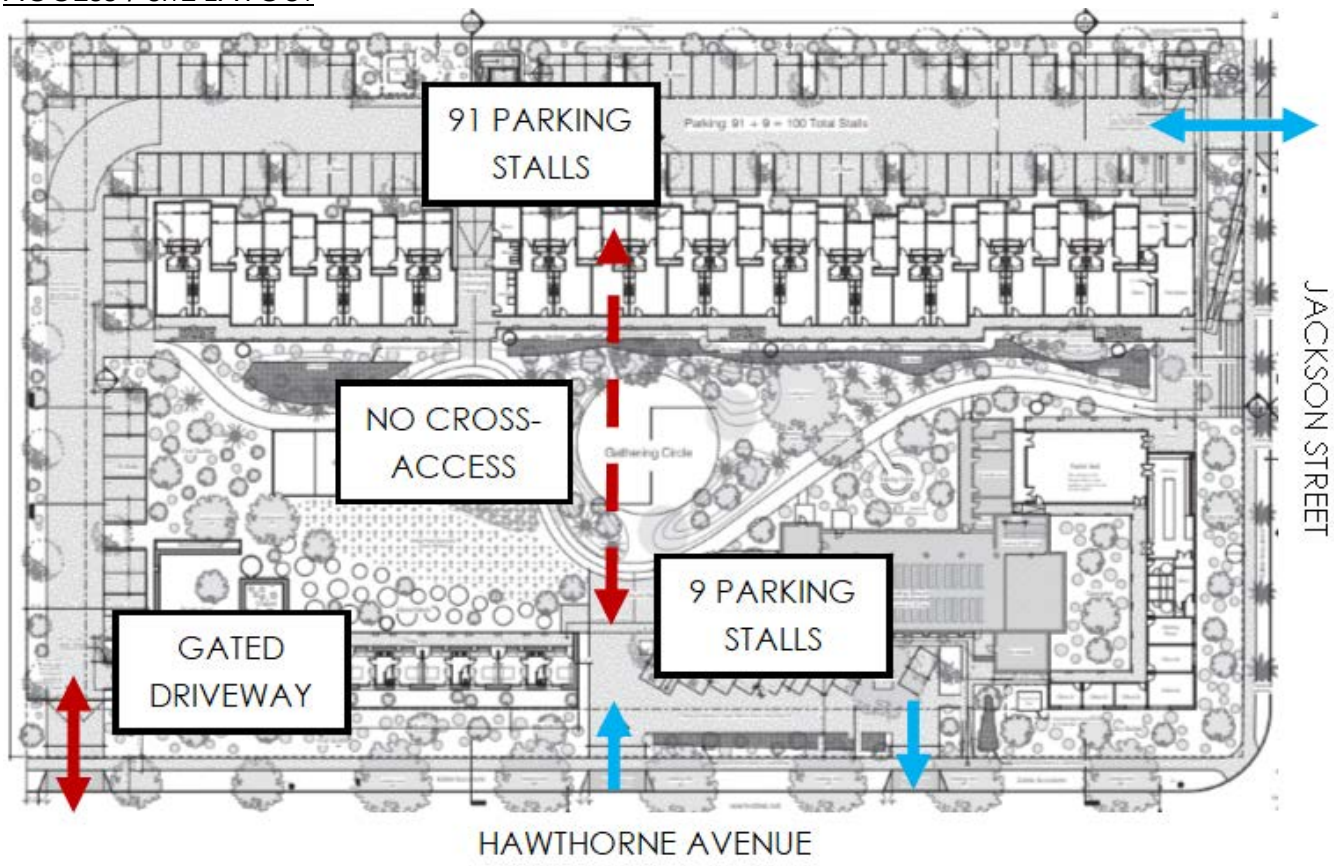
4. *Local Data – Affordable Housing Generation Measurements (adjusted for anticipated vehicle ownership numbers)*

This method uses the rates developed through measurement of the Homefront at Camp Anza, and adjusts them based on estimated vehicle ownership for the income brackets proposed to be served by the St Michael's Community Housing Project (24 Extremely Low Income units, 25 Low Income units, and one manager's unit).

Method	Description	AM Peak Hour Trips	PM Peak Hour Trips
1	ITE Trip Generation Rates	25	32
2	ITE Trip Generation Rates - Adjusted for income / vehicle	17	22
3	Locally measured data	38	38
4	Locally measured data - Adjusted for income / vehicle ownership	33	33

The selected method for trip generation, Method 4, reflects local data for an existing affordable housing development, reflects residents who opted to use on-street parking, and adjusts rates to account for the proposed Extremely Low-Income units at St. Michael's Community Housing. With an anticipated 33 vehicles per peak hour associated with the housing, plus an additional two per peak hour associated with the Church expansion, the project falls well below the 100 vehicle trips per peak hour threshold for analysis, and is still below the 50 vehicle per peak hour threshold at which staff may request a small-scale analysis.

ACCESS / SITE LAYOUT



The proposed site features a primary access driveway along Jackson Street, with no cross access to the smaller parking lot along Hawthorne Avenue. The primary parking lot does connect to a separate gated driveway along Hawthorne Avenue, but this access point is for the exclusive use of Friary residents and will not be used by residents of the affordable housing development or church visitors.

PARKING DEMAND ALONG HAWTHORNE

Because access to the 91-stall primary parking lot is solely taken from Jackson Street, and because the limited vehicle ownership and trip generation of the proposed future residents should be accommodated within the 91-stall parking lot, it is unlikely that future residents will choose to park along Hawthorne Avenue adjacent to the applicant's site. However, in the interest of a thorough review, the existing parking conditions were examined during the morning (7:30 AM), evening (5:00 PM), and nighttime (9:00 PM) on a non-street-sweeping day (1/28/2020). During each of these visits, Staff found that ample parking was available both along the entirety of the applicant's frontage, and along the south side of the road as well. These findings indicate that even if some future residents chose to park along Hawthorne, that sufficient parking space is available to accommodate them. Pictures of each visit are shown below:

Figure 1: Morning Visit Facing East

Figure 2: Afternoon Visit Facing East

Figure 3: Nighttime Visit Facing West

In each of the scenarios, hundreds of contiguous feet of on-street parking are available on either side of the road.

EXISTING DELAYS AT HAWTHORNE & JACKSON + KINGSBURY & CALIFORNIA

While the memorandum has demonstrated that the proposed project is anticipated to generate a minimal amount of vehicle trips, and these trips are anticipated to access the site from the proposed access along Jackson Street, measurements were taken at existing intersections in response to residents' stated concerns.

Staff studied the intersection of Hawthorne Avenue at Jackson Street during the AM and PM Peak Commute Hours (7:30-8:30 AM and 4:30-5:30 PM).

During the AM Peak Hour, 32 vehicles were measured entering / exiting Hawthorne Avenue. Motorists waiting to complete a right or a left turn out waited an average of 6 seconds, while motorists waiting to complete a left turn in waited an average of 7 seconds. Only one queue formed containing two vehicles, which cleared within a matter of 15 seconds.

During the PM Peak Hour, 34 vehicles were measured entering / exiting Hawthorne Avenue. Motorists waiting to complete a right or a left turn out waited an average of 3 seconds, while those waiting to complete a left turn in waited an average of 9 seconds.

The City uses "Level of Service" to assess impacts to motorist delay; it is a letter grade that corresponds to the number of seconds of delay incurred by motorists on average at an intersection. In both of these scenarios, such a low average approach delay is considered Level of Service "A" which is the highest standard for level of service.

Table 2. Level of Service Criteria for Unsignalized Intersections

Level of Service	Average Control Delay (seconds/vehicle)
A	0 – 10
B	>10 – 15
C	>15 – 25
D	>25 – 35
E	>35 – 50
F[1]	>50

Source: *Highway Capacity Manual 2010*, Transportation Research Board, 2010.

1. If the volume-to-capacity (v/c) ratio exceeds 1.0, LOS F is assigned an individual lane group for all unsignalized intersections, or minor street approach at two-way stop-controlled intersections. Overall intersection LOS is determined solely by control delay.

Similarly, measurements along Kingsbury for ½ hour during the morning peak commute and ½ hour during the evening commute reflect an average delay of 6 seconds for outbound motorists in the AM, and 7 seconds on average for outbound motorists during the PM. One outlier measured and not included in the dataset during the PM Peak waited for over one minute for

unknown reasons (as several gaps were observed in traffic). Both sets of measured delay at Kingsbury correspond to a Level of Service "A,", and if the outlier is included in the PM Peak dataset the intersection still averages to a Level of Service "B."

FINDINGS

- With an estimated vehicle trip generation of 35 vehicles during both the AM and PM Peak Hours of Traffic, the project is not required to complete a Traffic Impact Analysis.

- Vehicle ownership trends published by the FHWA and California Department of Transportation indicate that residents of the proposed site will own fewer vehicles by a significant margin than residents of a market rate housing development. This will reduce parking and general vehicular demands for the site.

- The proposed site does not have primary access for residents via Hawthorne Avenue, significantly reducing concerns over additional delay along Hawthorne or Kingsbury.

- Given lower vehicular ownership estimates and the site's proposed access patterns the need for additional parking along Hawthorne on-street is likely minimal, but significant on-street parking availability was noted throughout the day.

- Measured delays at the intersections of Hawthorne & Jackson and Kingsbury & California correspond to Level of Service "A;" minimal project traffic is anticipated to make use of these intersections.

CONCLUSION

- The proposed site is not anticipated to have a significant impact on traffic operations within its vicinity.