

**Council Meeting: June 9, 2009****SUBJECT: Site Access and Cut through Traffic Analysis for the Kaiser Permanente Santa Clara Medical Center Facility – Study Issue****REPORT IN BRIEF**

The City Council, as part of its 2008 Study Issues process, approved a study of access alternatives, including allowing left turns out of the Kaiser Permanente Santa Clara Medical Center facility onto Homestead Road. The study was prompted by requests from Kaiser Permanente and several citizens to consider allowing left turns from a driveway on Homestead Road to westbound Homestead Road. The study issue paper is included as Attachment A. Staff has prepared an analysis and held a community meeting to gather input on the initial findings. The final study is included as Attachment B. Of five alternatives considered, the study concludes that allowing left turns onto Homestead Road would slightly improve intersection level of service at the Lawrence Expressway/Homestead Road intersection and would not cause cut-through traffic in the residential neighborhood north of Homestead; improving Kaiser site access to the west, and constructing new access to the south, would cause slight changes (improvements and degradation) to intersection levels of service, but would add undesirably high volumes of traffic to residential areas to the south and provision of a channelized lane for Kaiser traffic on Homestead Road would require unorthodox design features, and could degrade traffic safety and increase roadway congestion.

Staff recommends that the Council accept the traffic analysis for the Kaiser Santa Clara Medical Facility and approval to allow left turns from the Kaiser Santa Clara Medical Facility to westbound Homestead Road.

BACKGROUND

The Kaiser Permanente Santa Clara Medical Center at Lawrence Expressway and Homestead Road was considered for approval by the City of Santa Clara in the mid-1990's. The project generated significant controversy involving the developer, residents of the area, the City of Sunnyvale, the County of Santa Clara, and the City of Santa Clara. Detailed historical information is included in Reports to Council 95-281 and 96-117, which are included in this report as Attachments C and D. In essence, Sunnyvale had a number of concerns regarding the design of the project, and as a means of influencing the design so as not to orient the facility towards Homestead Road, the City elected to approve the construction of a median barrier in the City-owned right of way to

restrict left turn access to the facility. This was later modified, at Kaiser's request and with support of Sunnyvale residents, to allow left turns into the site but not out of the site.

Subsequent to the opening of the new hospital facility, the City was approached by Kaiser with a request to reconsider the left turn restriction. The City has also received a number of requests from citizens to re-look at this issue. As a result, the City Council approved a 2008 study issue to examine alternatives for access to the Kaiser facility. The study issue was contingent on Kaiser Permanente providing funds to complete the study, which Kaiser then gifted \$46,530 in funding to complete the study.

EXISTING POLICY

Land Use and Transportation Element C3.1.4, Study and implement physical and operational improvements to optimize roadway and intersection capacities.

DISCUSSION

The technical analysis studied five access alternatives under both existing conditions and future conditions. The five alternatives were:

1. Existing site access
2. Allowing left turns out of the site to westbound Homestead Road
3. Additional access along the western and southern boundaries of the site, with no left turns allowed to westbound Homestead Road
4. Additional access along the western and southern boundaries of the site, with left turns allowed to westbound Homestead Road
5. Channelizing Kaiser traffic in it's own lane on westbound Homestead Road to physically limit access to the neighborhood to the north

The study utilized level of service analysis, travel time surveys, roadway segment analysis and queuing analysis to evaluate conditions. Four time periods were evaluated for each scenario: AM peak hour of adjacent street traffic, mid-day peak traffic generation of the medical center, afternoon peak traffic generation of the medical center, and PM peak hour of street traffic. Eleven intersections and eleven street segments were analyzed.

The purpose of the study was to evaluate whether allowing left turns from the Kaiser property to westbound Homestead Road would cause neighborhood cut-through traffic in the residential area north of Homestead Road, and whether access alternatives to allowing this left turn would provide convenient access without encouraging neighborhood traffic.

The study found that allowing the left turn would not encourage neighborhood cut-through traffic because travel times on neighborhood streets are greater than utilizing main streets such as Homestead and Wolfe. One element of the travel time surveys was to conduct a car following study of traffic exiting the

Kaiser facility and traveling west, to determine the degree of existing cut through traffic. The car following study found that no vehicles used neighborhood streets to cut through. Allowing the left turn would have a benefit to traffic signal level of service at Homestead and Lawrence Expressway as well, by reducing the number of vehicles making U-turns to reach westbound Homestead Road.

The original “intent” of prohibiting the left turn movement was to discourage traffic from the Kaiser facility from traveling towards Sunnyvale on Homestead Road. This traffic may have been destined towards points anywhere west, northwest, or southwest, and may or may not have cut through Sunnyvale neighborhoods. At the time of the prohibition, traffic studies were speculative and not definitive. At this time, actual traffic from the facility has been studied. In addition, considerable feedback has been heard from Kaiser facility users and Sunnyvale residents. The conclusion of the traffic study is that traffic destined for points west of the facility and for which Homestead Road is the most direct route will make the U turn at Lawrence Expressway and travel on westbound Homestead Road regardless of the left turn prohibition. Other travel routes via northbound or southbound Lawrence Expressway to other westbound routes are not convenient because they take much longer to drive. The traffic study has also clearly shown that existing Kaiser traffic utilizing westbound Homestead Road is not cutting through the residential area to the north. Travel routes through this area are for the most part longer and less direct, therefore traffic tends to stay on the major road. This is likely to continue in the future. Allowing the left turn would improve traffic signal level of service at one intersection (Lawrence/Homestead), which is designated a regionally significant intersection by the Santa Clara County Congestion Management Program (CMP). This constitutes a positive impact. Traffic level of service at the Homestead/Kaiser entrance intersection would not change and would remain high, as traffic volumes would not increase, but would rather redistribute. Public testimony and staff’s observation confirm that the high speeds of traffic exiting southbound Lawrence Expressway to westbound Homestead creates a greater potential for vehicle conflicts with U-turning traffic. U-turns and high speed left turns also create an unfriendly pedestrian environment at the northwest corner of Lawrence and Homestead, and the intersection is an area of higher pedestrian activity due to the presence of the medical center and nearby commercial areas. For these reasons, staff recommends allowing the left turn from the Kaiser driveway to westbound Homestead Road.

Improving other access routes such as Forge Drive, Swallow Way, and residential streets to the south would result in improvement of levels of service at intersections along routes from which traffic would be diverted. For example, some traffic now utilizing the Lawrence Expressway/Kaiser entrance intersection would likely divert to a new southern access, resulting in improvement level of service at the Lawrence Expressway/Kaiser entrance intersection. Level of service was found to decline slightly at the Forge

Drive/Swallow Way intersection. Most significantly, a new southern access to one or more of the three residential streets to the south – Hubbard Way, Gianinni Way, or Hilsdale Drive – would result in a substantial increase in traffic on these streets. Increases could be on the order of 900%, and volumes would likely exceed traffic engineering guidelines for desirable residential street volume. Creation of a new southern access would require the approval of the City of Santa Clara.

Creation of a channelized “Kaiser lane” on Homestead was evaluated as a means to allow the westbound left turn while restricting access to the neighborhood to the north by Kaiser traffic. Traffic turning left onto westbound Homestead from Kaiser would remain in an exclusive lane separated from the rest of the travel lanes by a narrow median or channelizing devices. This alternative could not be implemented without eliminating left turns from Homestead to Swallow Way, Tantau/Quail Avenue, and Peacock Avenue. The traffic signal at Homestead and Tantau/Quail would need to be modified; this signal is under the jurisdiction of the City of Cupertino. Even with a posted left turn restriction the unorthodox lane and intersection configurations could lead to drivers attempting to make lefts across the channelized lane, which would be a potentially serious safety hazard. The channelized lane might potentially be constructed to allow left turning traffic to enter the channelized lane at certain points; however any opening in the channelized lane could also be utilized to exit the lane, which would defeat the lane’s purpose. It would also require eastbound left turning traffic to turn left from a through lane, which would eliminate the margin of safety provided by the existing left turn pockets. In general, such a roadway configuration would be highly unconventional, challenging to implement, and confusing and possibly unsafe to the traveling public.

FISCAL IMPACT

Depending upon the City Council’s direction, fiscal impacts may vary significantly.

There is no fiscal impact for maintaining the existing condition. Allowing left turns from Kaiser to westbound Homestead Road is not likely to have a fiscal impact. Median barriers can be removed using existing operating budgets, and the traffic signal is the jurisdiction of the City of Santa Clara, so modifications to allow the left turn would likely be borne by Santa Clara.

Pursuing improved or new access to the west and south of the Kaiser site would have unknown fiscal impacts. Some improvements to roadways to the west of the site will be implemented by Kaiser as a condition of the project’s approval; constructing a new access to the south would have an unknown construction cost and it is not known who would bear that cost. The City of Santa Clara would have jurisdiction over approval of this improvement.

Construction of a channelized lane would require capital construction. Staff estimates that the cost of this improvement could be in the range of \$250,000 to \$350,000.

Public Outreach

A public outreach meeting was held on April 2, 2009, at the Sunnyvale Community Center. Approximately 120 citizens attended. Notification was made to interested parties that had corresponded with the City, as well as community groups. The meeting was also advertised on the City's web site. Summaries of comments made at the meeting are included as Attachment E. Most public input has been to express an opinion on the issue or ask general questions; very few comments on the technical adequacy of the document have been received, and those are responded to in an appendix of the traffic study.

Public comments have primarily been focused on the issue of whether or not to allow the left turn to westbound Homestead, not on other access alternatives. Correspondence to the City is running roughly 87% in favor of allowing the left turn. A show of hands at the April 2, 2009 community meeting showed approximately 95% in favor of allowing the left turn. Staff is aware that Kaiser Permanente has been notifying its staff and members of the issue, which has had some impact on the level of feedback that the City is receiving on the issue. Staff is also aware that the Birdland neighborhood group is also distributing information on the issue.

The City has received considerable correspondence on this issue; correspondence received since the initiation of the outreach effort is included as Attachment F.

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall, in the Council Chambers lobby, in the Office of the City Clerk, at the Library, Senior Center, Community Center, and Department of Public Safety; posting the agenda and report on the City's Web site; and making the report available at the Library and the Office of the City Clerk.

In addition, notices of this hearing were mailed to interested parties that contacted the City or attended a public outreach meeting held April 2, 2009 at the Sunnyvale Community Center.

ALTERNATIVES

1. Council accept the traffic analysis for the Kaiser Santa Clara Medical Facility and take no action at this time and allow the restriction on left turns to westbound Homestead from the Kaiser facility to continue.

2. Council accept the traffic analysis for the Kaiser Santa Clara Medical Facility and direct staff to pursue eliminating the left turn restriction from the Kaiser facility to westbound Homestead Road.
3. Council accept the traffic analysis for the Kaiser Santa Clara Medical Facility and direct staff to enter into discussions with the City of Santa Clara to determine the feasibility of creating a new access to the southern boundary of the Kaiser facility.
4. Council accept the traffic analysis for the Kaiser Santa Clara Medical Facility and approve a new capital project to construct a channelized lane for Kaiser traffic turning onto westbound Homestead Road.

RECOMMENDATION

Staff recommends Alternative 2: Council accept the traffic analysis for the Kaiser Santa Clara Medical Facility and direct staff to pursue eliminating the left turn restriction from the Kaiser facility to westbound Homestead Road.

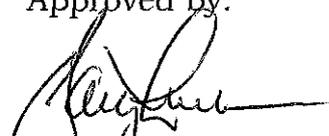
Reviewed by:



Marvin A. Rose, Director of Public Works

Prepared by: Jack Witthaus, Transportation and Traffic Manager

Approved by:



Gary M. Luebbers
City Manager

Attachments

- A. Study Issue Paper
- B. Site Access and Cut Through Traffic Analysis for the Kaiser Permanente Santa Clara Medical Center Facility
- C. Report to Council 95-281
- D. Report to Council 96-117
- E. Community Meeting Summaries
- F. Correspondence Received During the Outreach Process

Proposed 2008 Council Study Issue

DPW 20 Kaiser Hospital Access Study

Lead Department	Public Works
Element or Sub-element	1.0 Land Use and Transportation
New or Previous	New
Status Above the line None	History 1 year ago Dropped 2 years ago

1. What are the key elements of the issue? What precipitated it?

At the Council meeting of November 20, 2007, representatives of the new Kaiser Hospital development in Santa Clara spoke of their interest in possible reconfigurations of traffic patterns and/or traffic signalization on Homestead road as a result of that development. Councilmembers Hamilton, Spitaleri and Lee supported a study issue paper for Council consideration.

Specific Council action taken in 1996 was to "approve a modified median barrier on Homestead Road which would allow left turns into Kaiser Hospital, but continue to preclude left turns from Kaiser Hospital onto Homestead Road." This action followed significant community outreach and numerous public meetings. The prohibition of a left turn onto Homestead was specifically intended to minimize impacts to adjacent Sunnyvale neighborhoods. The City did "reserve the right to reconsider its (1996) decision should the nature or intensity of the proposed project be changed". This study would investigate a change in traffic signalization, a left turn onto Homestead Road or reconsideration of traffic patterns in general. The scope of the analysis would include investigation of traffic distribution to and from all access points to the Kaiser facility, and consideration of new access points as an alternative to allowing left turns on Homestead Road or as an augmentation of allowing left turns onto Homestead Road, as suggested by Vice-Mayor Hamilton. Detailed historical information is available in RTC's 95-281 and 96-117.

2. How does this relate to the General Plan or existing City Policy?

1.0 Land Use and Transportation - Action Statement C3.1.4 Study and implement physical and operational improvements to optimize roadway and intersection capacities.

Specific Council action taken in 1996 was to "approve a modified median barrier on Homestead Road which would allow left turns into Kaiser Hospital, but continue to preclude left turns from Kaiser Hospital onto

Homestead Road." RTC's 95-281 and 96-117.

3. Origin of issue

Council Member(s) Hamilton, Spitaleri, Lee
General Plan
City Staff
Public
Board or Commission none

4. Multiple Year Project? No **Planned Completion Year** 2009

5. Expected participation involved in the study issue process?

Does Council need to approve a work plan? Yes
Does this issue require review by a Board/Commission? No
If so, which?
Is a Council Study Session anticipated? No
What is the public participation process?
 Multiple neighborhood outreach meetings, stakeholder meetings.

6. Cost of Study

Operating Budget Program covering costs
Project Budget covering costs
Budget modification \$ amount needed for study
 \$50,000.00
Explain below what the additional funding will be used for
 Study of traffic generation, traffic patterns, traffic control warrants, traffic calming. Staff recommends that study costs be funded by Kaiser.

7. Potential fiscal impact to implement recommendations in the Study approved by C

Capital expenditure range None
Operating expenditure range \$500 - \$50K
New revenues/savings range None
Explain impact briefly

Modification of turn restrictions if left turns are allowed from the Kaiser facility. Fiscal imp could be greater if significant additional neighborhood traffic calming measures are ident

8. Staff Recommendation

Staff Recommendation None

If 'For Study' or 'Against Study', explain

9. Estimated consultant hours for completion of the study issue

400

Managers

Role	Manager	Hours
Lead	Witthaus, Jack	
	Mgr CY1:	60
	Mgr CY2:	0
	Staff CY1:	60
	Staff CY2:	0

Total Hours CY1: 120

Total Hours CY2: 0

Note: If staff's recommendation is 'For Study' or 'Against Study', the Director should note the relative importance of this Study to other major projects that the Department is currently working on or that are soon to begin, and the impact on existing services/priorities.

Reviewed by

Department Director

Date

Approved by

City Manager

Date

Addendum

A. Board / Commission Recommendation

Issue Created Too Late for B/C Ranking

Board or Commission	Rank Rank 1 year ago	Rank Rank 2 years ago
Arts Commission		
Bicycle and Pedestrian Advisory Committee		
Board of Building Code Appeals		
Board of Library Trustees		
Child Care Advisory Board		
Heritage Preservation Commission		
Housing and Human Services Commission		
Parks and Recreation Commission		
Personnel Board		
Planning Commission		

Board or Commission ranking comments

B. Council

Council Rank 2
Start Date (blank)
Work Plan Review Date 4/22/2008
Study Session Date (blank)
RTC Date 12/2/2008
Actual Complete Date (blank)
Staff Contact Witthaus, Jack