

# CITY OF COMMERCE AGENDA REPORT

TO: Honorable City Council

**FROM:** City Administrator

**SUBJECT:** Consideration for All-Way STOP at Ferguson Drive & Gaspar Avenue

**MEETING DATE:** July 17, 2018

#### **RECOMMENDATION:**

City Council to consider installation of an all-way STOP, and other alternatives, at the intersection of Ferguson Drive & Gaspar Avenue and to provide Staff direction on the next course of action.

#### **BACKGROUND:**

Community members have voiced safety concerns with respect to the intersections at Ferguson Drive & Gaspar Avenue, which is located in the northern part of the City of Commerce, adjacent to East Los Angeles, and suggestions have been raised for the possibility of installing STOP signs at this intersection along Ferguson Drive, thus creating an all-way or multi-way STOP intersection, as shown below:



The City Council has directed Staff to find solutions so as to improve the overall vehicular and pedestrian safety at this intersection and has suggested the installation of an all-way STOP controlled intersection. Staff has conducted an analysis for this intersection to determine if such an all-way STOP control is warranted or unwarranted.

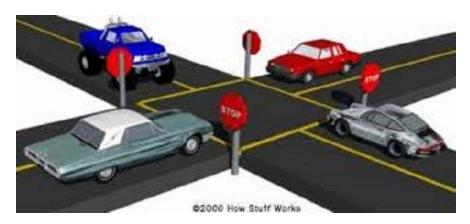
A traffic study was to analyze the feasibility of an all-way STOP at the intersection at Ferguson Drive & Gaspar Avenue. Other recommendations were put forward for consideration in order to better accommodate the traffic conditions unique to this intersection.

#### **ANALYSIS:**

A two-way STOP controlled intersection is one in which only one street or roadway is encumbered by STOP signs, and whereby the other street is allowed for free movement. An example of this is shown below and is currently the situation at the intersection of Ferguson Drive & Gaspar Avenue:



An all-way STOP controlled intersection is one in which all streets or roadways are encumbered by STOP signs, and no street is allowed free movement. An example of this is shown below:



It has been requested that Staff consider installing an all-way STOP controlled intersection at Ferguson Drive & Gaspar Avenue. Staff commissioned a traffic study to investigate this.

### Intersection of Ferguson Drive & Gaspar Avenue:

A traffic study was developed that investigated traffic counts, volumes, turning movements, pedestrian counts, accident history, and speed analysis in order to determine if an all-way STOP intersection is warranted or not (see Attachment 1).

The analysis surveyed the data and concluded that an all-way STOP at this intersection was *not warranted*. This is based on the all-way or multi-way STOP control warrants that are detailed in Part 2, Chapter 2B, section 2B.07, of the California Manual on Uniform Traffic Control Devices (CA MUTCD) [see Attachment 2]. Page 6 of Attachment 1 (traffic study) goes into detail in which some of the parameters were not met, such as minimum crash data and minimum traffic volumes.

Specifically, the installation of an all-way STOP at an intersection is justified if at least one of the following criteria is met, per section 2B.07 of the CA MUTCD (Attachment 2):

- A. Traffic control signals are justified (NOT Met)
- B. A crash problem exists as indicated by 5 or more accidents in a 12-month period. (NOT Met)
- C. Minimum Volumes are met if:
  - 1. Volume entering intersection from the major approach (total of both approaches) averages 300 vehicles per hour for any 8 hours of an average day [NOTE: During the regularly scheduled City Council meeting on July 3, 2018, Staff inadvertently referenced the vehicular volume average to be 200 vehicles per hour. The actual number is 300 vehicles per hour.]; (MET) AND
  - 2. The combined vehicle, pedestrian and bicycle volumes entering the intersection from the minor street approaches averages at least 200 units per hour for the same 8 hours; (NOT Met) BUT
  - 3. If the 85th percentile approach speed of the major-street exceeds 40 mph, the minimum volumes are 70 percent of the above values in Items 1 and 2. (NOT Met)
- D. Where no single criterion is satisfied, but where Criteria B, C.1, and C.2 are all satisfied to 80 percent of the minimum values. Criterion C.3 is excluded from this condition. (NOT Met)

Per the above warrants, the intersection at Ferguson Drive & Gaspar Avenue does NOT meet the minimum requirements, and based on this, the installation of an all-way STOP is *not* warranted.

However, other criteria may be considered when determining whether or not an all-way STOP is warranted:

- E. The need to control left-turn conflicts
- F. The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes

- G. Locations where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop
- H. An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where multi-way stop control would improve traffic operational characteristics of the intersection.

Based on "other" criteria stipulated above, an all-way STOP *may* be justified based on criteria enumerated in F, G, and H. Per these criterions, an all-way STOP can be justified based on overall traffic and pedestrian safety.

\* \* \* \* \* \* \* \* \* \* \* \* \*

An alternative option to the all-way STOP controlled intersection is to implement the following instead:

- Install new red curbs at both curb ramps of approximately 16-feet in length in order to improve sight distance for vehicles exiting southbound Gaspar Avenue. Currently, vehicles have parked at the curb ramps, thereby making it difficult for traveling vehicles to enter and exit Gaspar Avenue.
- 2. Install retro-reflective roadway markings denoting 30 miles per hour (MPH) for this roadway, Ferguson Drive. This will warn drivers who are approaching the intersection at Gaspar Avenue to slow down and to take caution.
- Install intersection retro-reflective warning signs (W2-2) per the CA MUTCD at approximately 150-feet to 200-feet from the intersection of Gaspar Avenue. These signs will effectively warn drivers that an intersection is to appear soon and to take caution.

The above recommendations are shown in the diagram below and numerically identified:



These recommendations serve to improve the overall vehicular and pedestrian safety at the intersection of Ferguson Drive & Gaspar Avenue by the placement of effective warning devices and measures. The implementation of these recommendations is also cost effective in terms of both installation and long-term maintenance.

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#### **ALTERNATIVES:**

- 1. Approve staff recommendation
- 2. Reject staff recommendation
- 3. Provide staff with further direction

#### **FISCAL IMPACT:**

For the installation of an all-way or multi-way STOP intersection at Ferguson Drive & Gaspar Avenue, direct costs include the fabrication of the proposed STOP signs (R1-1) and also new sign poles. Street markings such as STOP bars and STOP markings are also included as shown below, and this task can be executed with a work order to the County of Los Angeles Department of Public Works (County):

	TOTAL:	\$3,500
•	Install street markings (STOP marking, STOP bar, etc.) [lump sum]:	<u>\$2,000</u>
•	Custom fabricate two (2) STOP signs (R1-1) and poles:	\$1,500

For the alternative option, however, direct costs include the fabrication of the proposed intersection warning signs (W2-2) and yield to pedestrian signs (R1-5) with their appropriate dimensions. Also included are the installations of new sign poles. Street markings (including red curbs) and disabled curb ramp installations are also included.

Therefore, the approximate cost breakdown is as follows (includes material, labor, and installation). This cost breakdown is for both intersections at Ferguson Drive & Gaspar Avenue:

	TOTAL:	\$3,500
•	Install street markings (lump sum):	<u>\$1,500</u>
•	Install red curb markings (lump sum):	\$ 500
•	Custom fabricate two (2) intersection warning signs (W2-2):	\$1,500

The above approximate cost of \$3,500 will be absorbed by the Public Works Operations budget, or Public Works staff will consider appropriating funds from Measure AA for this work.

#### **RELATIONSHIP TO STRATEGIC GOALS:**

This item relates to Council's 2016 Strategic Action Plan's:

## Community Quality of Life

Per Guiding Principle 4: To "support and evaluate community services, programs and events that promote healthy and quality lifestyles for our residents. Enhance public safety and social services through innovative programs that meet the needs of the residential and business communities."

#### ATTACHMENTS:

- 1. Traffic Study at the Intersection of Ferguson Drive & Gaspar Avenue
- 2. CA MUTCD section 2B.07

Approved by: Maryam Babaki, P.E., Public Works & Development Services Director

Fiscal Impact reviewed by: Vilko Domic, Director of Finance

Approved as to form by: Norma Copado, City Attorney

Respectfully submitted: Edgar P. Cisneros, City Administrator