

March 1, 2024 Statement to Piedmont City Council

Ralph Catalano

Today's staff report implies that you can consider the Moraga Canyon Sports Field EIR (State Clearinghouse Number 2009112054) when formulating the Moraga Canyon Specific Plan. That EIR found that new entrances and exits to Blair Park would create a significant and unavoidable safety hazard for motorists, pedestrians and bicyclists on Moraga Avenue. How did LSA consultants, the authors of the EIR, come to such a conclusion? Caltrans has adopted US DOT equations that use road alignment, slope, and sight distances to calculate maximum speeds for safe stopping at intersections. As described on pages 253 to 255 of the EIR, LSA engineers assumed two entrances/exits to Blair Park positioned at Caltrans recommended distances from each other and from Red Rock and Maxwellton. They measured the shortest sight line to these intersections at 385 feet. Using the Caltrans equations, they estimated the maximum safe speed to be 35 MPH. 15% of trips on Moraga exceeded that speed.

Today, your consultants tell you that they have found locations for entrances to Blair Park that provide a longer minimum sight line than assumed by LSA. With this longer sight line, they calculate the fastest safe speed at 40 MPH. **They then claim, without documentation, that no one on Moraga travels at speeds greater than 40 MPH.**

I am surprised to learn that your consultants have found two entrance/exits with a minimum sight line that, when added to the DOT/Caltrans equations, produces a 40 MPH safe speed. But let's stipulate, for the sake of the conversation, that this is true. The simple fact remains, however, that the distribution of speeds observed on Moraga shows that at least 10% of trips **exceed** 40 MPH. This distribution was found before the preparation of the LSA EIR and was found again in subsequent studies including that for the City of Piedmont Bicycle and Pedestrian Safety Plan (I have attached that distribution and accompanying crash analysis).

So, how big is the problem? Assuming conservative trip generation of 4 per household, 132 families in Blair Park would generate more than 500 entrances from and exits to Moraga Avenue per day. How many of these will be at a time when they encounter a vehicle traveling faster than 40 MPH? Moraga Avenue will, according to the Housing Element EIR, carry about 15,000 trips a day. About 10%, or 1,500, of these will exceed 40 MPH. That implies more than 1 per minute. So, virtually every one of the 500 entrances or exits from Blair Park will likely encounter a safety hazard as defined by Caltrans. And this circumstance assumes your consultants' yet to be verified locations for entrances/exits. The risk will be even greater should the LSA locations prove correct. And remember, it remains city policy that projects will not be approved in Piedmont unless they provide safe sightlines. Indeed, the Housing Element EIR you have adopted states you will enforce that policy.

SPOT-SPEED ANALYSIS

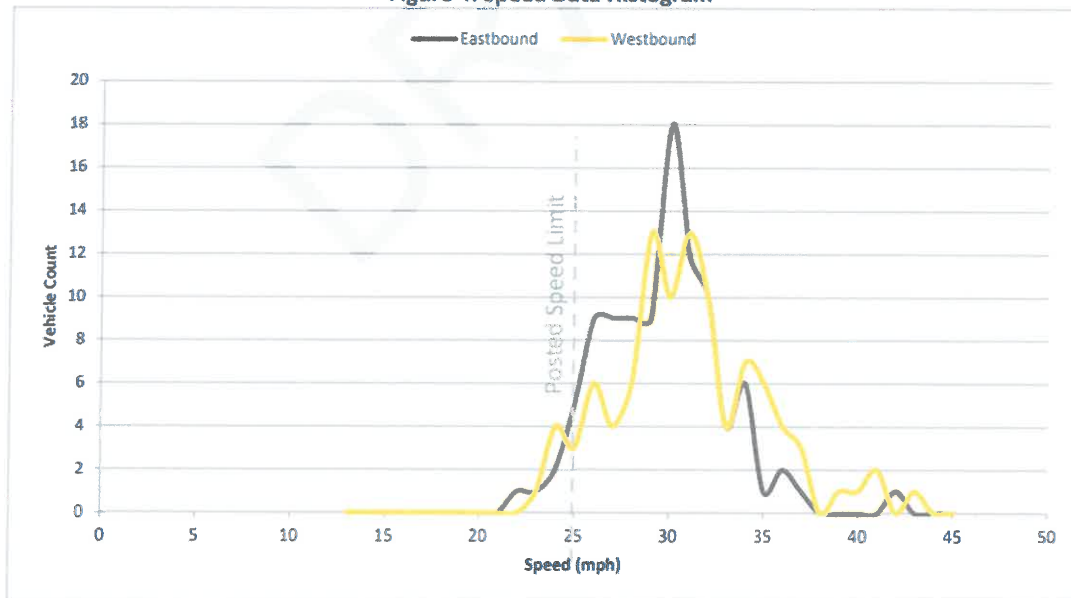
The KAI team obtained speed data through a data collection vendor. The speed data were collected on the off-peak (i.e., free-flow) hours of Monday, December 22, 2014 using a calibrated radar gun mounted on an inconspicuous vehicle as to not affect drivers' behavior. The data includes one hundred vehicles in each direction of travel on Moraga Avenue. Appendix B contains the speed data for individual vehicles.

In the vicinity of the study intersection, the observations indicate that 84 percent of the surveyed motorists travelled in the range of 25 to 34 mph. Table 1 and Figure 4 summarize the speed data.

Table 1: Speed Data Summary

Speed Study Metrics	Moraga Avenue, at Ramona Avenue
Speed Limit	25 mph
Median (50th Percentile) Speed	30 mph
85th Percentile Speed	34 mph
10 mph Pace, (% of daily traffic in pace)	25-34 mph, (83.9%)

Figure 4: Speed Data Histogram



HISTORICAL CRASH ANALYSIS

KAI reviewed crash data for the intersection and adjacent roadway segments (within 200 feet of the intersection). KAI used data from the California Highway Patrol Statewide Integrated Traffic Records System (SWITRS) for the crash data review. The crash data covered the period from 2009 through November 2013.

Table 2 summarizes the crashes recorded at each study intersection during the January 1, 2009-November 30, 2013 study period.

The KAI team also received information of recent unreported crashes and spin-outs on Moraga Avenue, just east of the study intersection. The information was supplied by Coastland Civil Engineering on behalf of City of Piedmont staff and residents. It appears that the unreported crashes and community-observed spin-outs are due to vehicles losing control at the S-curve. Incidents of lost control that do not result in an injury or property damage are likely not captured in the crash data.

Table 2. Historical Crash Data Summary January 1, 2009- November 30, 2013

Year	Kingston Avenue/Linda Avenue/Rose Avenue Intersection
2009	No collisions recorded.
2010	On August 14, 2010, a Property Damage Only (PDO) crash occurred approximately 150 feet east of the study intersection. A vehicle struck a fixed object. Crash data indicates the weather was clear and pavement dry. The crash occurred during day time.
2011	No collisions recorded.
2012	- On May 30, 2012, a PDO crash occurred between two vehicles. One vehicle was reported as traveling at unsafe speeds. The crash occurred immediately east of the intersection. Crash data indicates clear weather, dry pavement, and daylight at the time of the crash. - On December 9, 2012, a PDO crash occurred approximately 200 feet east of the study intersection. A motorist turned and sideswiped a parked car under clear weather and dry pavement. The crash occurred during day time.
2013	- On July 3, 2013, a PDO crash occurred between a vehicle backing out of a parked position and another parked vehicle. The crash occurred under clear weather, dry pavement, and daylight. - On October 5, 2013, a PDO crash occurred at the study intersection. A vehicle struck a fixed object; the crash occurred at daytime and with dry pavement. - On October 12, 2013, a PDO crash occurred at the study intersection between a turning vehicle and a vehicle traveling on Moraga Avenue. The crash occurred under clear weather, dry pavement, and daylight. - On October 27, 2013, a nighttime DUI-related crash occurred at the study intersection. A vehicle hit a fixed object under foggy weather and dry pavement. The crash was a PDO crash.

Source: California Highway Patrol Statewide Integrated Traffic Records System (SWITRS)