Traffic Impact Analysis for Measure A

A recent pamphlet paid for by "Yes on A", disclosing major funding by the developer Caruso Affiliated, contains a page titled "What the City of Carlsbad Says About Measure A", displaying text quoted from the city website http://www.carlsbadca.gov/cityhall/clerk/facts.asp. The following statement is quoted: "Studies prepared by independent traffic engineers hired by the city concluded the plan would result in more cars on local roads, but traffic flow would actually be better if the plan is implemented because of the improvements the developer will make to roads, intersections and traffic signals." The city website supports this statement with links to The Appendix N Transportation Impact Analysis (TIA) of the Agua Hedionda South Shore Specific Plan (AH-SP), which was prepared by Fehr and Peers for Caruso, and the Elections Code Section 9212 Report on the Agua Hedionda South Shore Specific Plan, prepared by the Carlsbad City Council staff, which references a review of the TIA Report conducted by Michael Baker International on behalf of the city.

The TIA Report claims (page 5) that its analysis was conducted in compliance with the City of Carlsbad Growth Management Plan (GMP) and with regionally accepted traffic study guidelines published by the San Diego Regional Traffic Engineers/Institute of Transportation Engineers (SANTEC/ITE). The TIA applied criteria from both of those sources in its analysis:

- Per the GMP, the minimal level of service (LOS) is D (35 to 55 second delay at signalized intersections) during peak hours.
- Per the SANTEC/ITE, if a proposed project's traffic causes a delay exceeding 2 seconds at an intersection, the impact is determined to be significant.

The TIA applied these criteria in combination such that the SANTEC/ITE criterion was only applied to intersections that failed the GMP minimal requirement, rather than independently:

1. The TIA specified that if addition of AH-SP traffic is expected to degrade desirable service levels (LOS D or greater) to more congested service levels (LOS E or F) at an intersection, then the AH-SP is considered to have a significant direct impact.
2. The TIA further specified that if the LOS for any intersection without the AH-SP is already LOS E or F and the AS-SP adds traffic to this location causing the delay to increase by more than 2 seconds, then this is characterized as a significant impact.

Thus in the TIA analysis, if the AH-SP caused the delay at an intersection to increase by more than 2 seconds but the delay remains less than 55 seconds, the TIA did not view it as significant, although by SANTEC/ITE alone the impact would be determined to be significant.

This alteration in the definition of "significant impact" has major consequences for interpreting the TIA analysis. Using a traffic model developed by the San Diego Association of Governments (SANDAG), the TIA developed future traffic forecasts for 2019 (the AH-SP projected opening year) and 2035, with separate forecasts for each time point without and with implementation of the AH-SP. In the 2019 forecast, among 34 intersections in the vicinity of the AH-SP site, only 2 on El Camino Real at several miles distance from the AH-SP site met both TIA criteria for significance referenced above (line information below identifies intersection; AM or PM peak hour; level of service without vs with AH-SP plan; increase in delay with AH-SP plan):

Cannon Rd / El Camino Real; PM; E vs E; 7.1 second increased delay

Alga Rd - Aviara Pkwy / ECR; AM; E vs E; 2.4 second increased delay
PM; E vs E; 4 second increased delay

However, examination of Table 18 in the TIA Report (page 76), reveals that 10 of the 34 intersections met the SANTEC/ITE criterion of significance alone, including the following intersections on Cannon Road in close proximity to the AH-SP site:

I-5 SB Ramps / Cannon Rd; PM; B vs D; 19.4 second increased delay

I-5 NB Ramps / Cannon Rd; AM; B vs C; 13.8 second increased delay
PM; B vs C; 18.3 second increased delay

Cannon Rd / Paseo Del Norte; AM; B vs C; 18.3 second increased delay
PM; B vs D; 33.8 second increased delay

Cannon Rd / Car Country Dr; PM; C vs C; 5.6 second increased delay

In addition, the AH-SP proposes to construct a new Specific Plan Driveway intersection on Cannon Road between Paseo Del Norte and Car Country Drive, which is projected to produce an 8.7 second delay at AM peak hour and 18.8 second delay at PM peak hour (Table 18).

Although the TIA Report claims that the increased delays associated with AH-SP would not have a significant impact at these intersections using its criteria, each of them substantially exceeds the SANTEC/ITE criterion for significance alone, according to which the impact is determined to be significant if a proposed project's traffic causes a delay exceeding 2 seconds at an intersection. Considering that the above are consecutive intersections along Cannon Road, the cumulative increased delay for a vehicle traveling that road near the AH-SP site would exceed a half minute at the AM peak hour and a minute at the PM peak hour.

Thus, the TIA Report's claim that it was conducted in compliance with SANTEC/ITE guidelines is contradicted in its interpretation of the analysis results for year 2019. A similar contradiction is evident in its interpretation of analysis results for year 2035, comparing forecasts without and with implementation of the AH-SP. The Report indicates (page 93) that the AH-SP would result in a significant impact at 9 locations, whereas inspection of Table 26 reveals that an increased delay of greater than 2 seconds is projected for 16 of the 34 intersections with the AH-SP plan. The 9212 Report (Section 4.6, page 26) claims to present an independent analysis. It states that the TIA methodology complies with the SANTEC/ITE guidelines, but does not identify the contradiction of those guidelines noted above.

Neither the TIA Report nor 9212 Report thus acknowledges the full extent of negative impact that the AH-SP Initiative would produce on traffic in the City of Carlsbad. The 9212 Report endorses the TIA Report conclusion that in 2019 the AH-SP will have a significant impact at only 2 intersections, and comments that implementation of AH-SP Initiative traffic Environmental Protection Features (EPFs) will reduce traffic impacts at both of those intersections such that they will comply with GMP standards. Similarly to the TIA Report, the 9212 Report comments that in 2035 the AH-SP will have a significant impact at only 8 intersections, and suggests that implementation of AH-SP traffic EPFs will reduce traffic impacts at those intersections below what the traffic impacts would be without AH-SP, although the GMP standard will still not be met, and concludes: "implementation of the AH-SP Initiative EPFs will improve traffic conditions to a point that driving in Carlsbad will not be degraded as a result of the proposed AH-SP Initiative at any intersection in the City of Carlsbad in the year 2035." The AH-SP Initiative EPFs mentioned in the 9212 Report include payment of the Citywide Traffic Impact Fee, Bridge and Thoroughfare District No. 3 Fee, and payment of $140,000 to install adaptive signals at seven intersection locations along El Camino Real, Palomar Airport Road, Paseo Del Norte, and Cannon Road.

The TIA Report and 9212 Report do not support the claims above regarding the benefits of AH-SP Initiative EPFs. Many, if not all, improvements in roads and traffic signals that are mentioned as EPFs of the AH-SP are already planned under the City's Traffic Impact Fee (TIF) and Traffic System Management (TSM) programs. The AH-SP is proposing to help pay for those programs, which alternatively could proceed without the AH-SP. Table 32 of the TIA Report (and a bar graph on the carlsbadca.gov website) show wait times at intersections in 2035 as shorter under the AH-SP with EPFs than without the AH-SP, but not compliant with the Carlsbad GMP minimal D level of service. Missing from the presentation is a forecast of traffic figures with the effect of the TIF and TSM programs alone, which could meet the GMP standard and would be expected to result in shorter wait times than would occur with the AH-SP plus EPF proposal.

The 9212 Report notes that the AH-SP's proposed additional intersection on Cannon Road is located closer to Car Country Drive and Paseo Del Norte than is specified in the city's design standard, "but is acceptable and should be allowed a variance from the city's General Design Standards because it minimizes the traffic impacts of the AH-SP Initiative along Cannon Road." The SANDAG model used to forecast traffic generated from the AH-SP included its proposed additional intersection and traffic lanes along Cannon Road. Figure 7 in the TIA Report shows projected AH-SP trips for those additions: for example, during the PM peak hour there are projected to be 988 left turns from eastbound across westbound Cannon Road into the Specific Plan Driveway at the new signal. Considering that the traffic forecasts discussed above include effects of AH-SP roadway modifications, those same modifications cannot be invoked as mitigations for the significant delays by SANTEC/ITE criteria projected by the forecasts.

The TIA analyzed freeway segment and ramp operations based on procedures developed by the California Department of Transportation (Caltrans) District 11. The 9212 Report states "since the city does not operate the freeway system, the AH-SP's impact on freeway segment and ramp operations is not included in this report," but comments that the EPFs provide for payment of fair share contributions toward the impacted components of the I-5 planned freeway improvements in the AH-SP area, although the developer has not completed discussion with Caltrans to determine the amount and timing of its contribution.

The TIA Report comments that in both 2019 and 2035 all freeway segments near the AH-SP are expected to operate at LOS E either without or with the AH-SP, except the segment between Tamarack Avenue and Carlsbad Village Drive, which degrades from LOS D to E with addition of AH-SP trips. The TIA Report indicates that addition of AH-SP trips at all other segments would further exacerbate operations, and that the AH-SP would have a significant delaying impact on the I-5 SB on-ramp at Tamarack Avenue in 2019 and 2035, as well as the I-5 SB on-ramp from Cannon Road in 2035.

In summary, The Transportation Impact Analysis (TIA) of the Agua Hedionda South Shore Specific Plan (AH-SP) and the Elections Code Section 9212 Report on the Agua Hedionda South Shore Specific Plan do not support the statement on the City of Carlsbad website that "traffic flow would actually be better if the plan is implemented because of the improvements the developer will make to roads, intersections and traffic signals." Neither the TIA Report nor 9212 Report acknowledges the full extent of negative impact that the AH-SP would produce on city traffic. The TIA Report predicts that the AH-SP would degrade traffic flow on I-5 and have a significant delaying impact on multiple I-5 ramps. The TIA and 9212 Reports do not support claims that AH-SP Environmental Protection Features (EPFs) would overcome adverse traffic impacts that would result from implementation of the AH-SP, and the veracity of such claims is therefore in doubt.