

Mariposa Energy Project 09-AFC-3

Technical questions from Andrea Koch, CEC staff, to Doug Urry about Table 5.12-7 in AFC Section 5.12, Traffic and Transportation. These were technical clarifications about the information in the table.

- 1) In the **freeway segments** table, the figures for project-generated trips during the AM and PM peak hours do not include truck traffic. (The figures only include construction employee trips.) However, the **roadway segments** table DOES appear to include truck traffic. Why?

Response:

The figures for project-generated trips during the AM and PM peak hours do include truck traffic in both cases. There are 18 daily truck trips per day, and it was assumed that 2 trucks come in and out of the site during the peak hour. The reason why the magnitude of the project-generated traffic differs greatly is because for the roadway segments, the total number of trips per day was considered for the analysis, whereas for freeway segments, the number of trips generated during the peak hour only was considered for the analysis.

- 2) The **roadway segments** table shows AADT, while the **freeway segments** table shows peak hour trips. Why were traffic volumes quantified differently?

I'm guessing it's because of the note on page 50 of AFC Supplement A that states: "Peak hour count (for the roads) is assumed to be one-way. CH2M HILL attempted to obtain the peak hour counts in the non-peak direction, but was subsequently not able to contact Mr. Bates". (It looks like there is no 2-way data for road peak hour traffic counts, and that is why AADT was used. Is this correct?)

Response:

We provided all data we were able to obtain; because the data provided by Alameda County is incomplete (they did not give us counts in the non-peak direction on roadway segments), we did not use it. We used Daily volumes (AADT) instead. Note that we attempted to obtain the missing data from Alameda County without success (it is difficult to get in touch with John Bates; he's the lead of the County's traffic division, and presumably very busy). We also spoke directly with his staff, but were referred back to Mr. Bates.

3) For the **roadway segments** table, I have questions about the “construction vehicles added daily” figure for Bruns Road, Mountain House Road, and Kelso Road:

- Bruns Road: Why is the figure 336? I got 372.

It looks like all vehicles would need to take this road. This would mean that all 159 “drivers” would make 318 daily one-way trips on Bruns Road. 318 would be added to the 54 PCE one-way truck trips for a total of 372 trips.

Response:

Agreed. The 10% of trips using Byron Highway to the project site were inadvertently not added. This would bring the total daily trips from 336 to 372 on Bruns Road, between Kelso Road and Christensen Road. The ADT during construction on this portion of Bruns Road is therefore 658, which means that this segment still operates at LOS B or better.

- Mountain House Road: What is the breakdown of car trips versus truck trips in this figure of 336?

Response:

The total number of construction-related vehicles were used for calculation purposes. The breakdown of car trips versus truck trips is what is shown in Table 5.12-6 of the AFC, and presented below with some clarifications. The figure of 336 was derived as follows: It was assumed that all but the 10% of construction traffic originating from Contra Costa County via Byron Highway would use Mountain House Road and Kelso Road. Therefore, $372 * 0.9 = 335$, which was rounded up to 336 throughout the various calculations steps.

TABLE 5.12-6
Construction Trip Generation Estimate

Trip Type	Total Trips Added				
	Daily One-Way Trips	AM Peak Hour		PM Peak Hour	
		In	Out	In	Out
Delivery/ haul trucks	36	2	2	2	2
PCE (1.5)	54	3	3	3	3
Construction workers (10% of the 177 workers carpool with others)	318	159	0	0	159
Total Construction Traffic	372	162	3	3	162

- Kelso Road: What is the breakdown of car trips versus truck trips in this figure of 336?

Response:

The total number of construction-related vehicles was used for calculation purposes. Please see the response above for the explanation on how the figure of 336 was derived.