



MEMORANDUM

Department of Public Works – Transportation Division

Date: December 7, 2022

Re: Vegas Rising Traffic Impact Study Non-Technical Summary

Background

Vegas Rising is a mixed-use development planned to contain 1,341 multi-family units and 85,000 square feet of retail. It is bounded by Richfield Blvd. on the west, Wilmington Way on the north, Wyandotte St. to the east, and extending one row of lots south of Milo Way. A connection to Rancho Dr. is proposed by extending Wyandotte St. to the south. A Traffic Impact Study, TIA76156, was performed by the developer's consultant, Kimley-Horn & Associates, and was approved by the City of Las Vegas.

The project is expected to generate 564 net new trips in the AM peak hour and 750 net new trips in the PM peak hour. The net increase in Average Daily Trips (ADT) is 9,878; note that in a Traffic Impact Study, analysis is based on the peak hours rather than the ADT, and on intersections rather than street segments. Level Of Service (LOS) is based on average delay per vehicle, with A being best and F being worst. Per the guidelines from the Regional Transportation Commission, the target LOS is C, with an LOS of D considered acceptable. Note that is for an intersection, not every individual movement.

Table 1 – Project Trip Generation

ITE Code	Description	Size	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
220	Multifamily Housing (Low-Rise)	456 Units	44	138	182	147	86	233
221	Multifamily Housing (Mid-Rise)	885 Units	75	252	327	210	135	345
821	Shopping Plaza (40-150k)	85,000 SF	91	56	147	216	225	441
Internal Capture			6	6	12	81	81	162
Proposed Total Trips			204	440	644	492	365	857
210	Single-Family Detached Housing (Existing Land Use)	114 Units	21	59	80	67	40	107
Net Proposed New Trips			183	381	564	425	325	750

Trip Distribution

The study assumed that 50% of the trips to and from the development would be to and from I-15. Of the remainder, 15% would use Sahara Ave. to the east, 15% would use Sahara Ave. to the west, 10% would use Rancho Dr. to Desert Inn Rd., 2% would use Rancho Dr. to Sirius Ave. and the final 8% would use Rancho Dr. north of Sahara Ave.

Wilmington Way and Richfield Boulevard

The study assumed that the 15% of the traffic going to and from the west on Sahara Ave. would use Fairfield Blvd.; 10% using Milo Way and 5% using Wilmington Way. At the intersection of Wilmington Way and Richfield Blvd., total traffic is expected to increase from 210 to 314 in the AM peak hour and from 301 to 331 in the PM peak hour. Delays at this intersection are expected to increase but remain acceptable. The worst delay is expected to be eastbound Wilmington Way in the AM peak hour, which will go from an average delay of 12.3 seconds to an average delay of 14.0 seconds, both LOS B.

Wilmington Way and Wyandotte Street

The study assumed that of the 15% of the traffic going to and from west Sahara Ave., 5% would use Wyandotte St. to Wilmington Way, and that of the 73% of the traffic going through the Sahara Ave./Rancho Dr. intersection, 25% would use Wyandotte Way to Teddy Dr. So, 30% of the project traffic is expected to use the Wilmington/Wyandotte intersection. Total traffic at the intersection is expected to increase from 607 to 981 in the AM peak hour and from 836 to 1,264 in the PM peak hour. Delays at this intersection are expected to increase but remain acceptable. The worst delay is expected to be northbound Wyandotte St. in the PM peak hour, which will go from an average delay of 10.4 seconds (LOS B) to an average delay of 16.6 seconds (LOS C).

Wyandotte Street/Kings Way and Teddy Drive

The study assumed that of the 73% of the traffic going through the Sahara Ave./Rancho Dr. intersection, 25% would use Wyandotte Way to Teddy Dr. and 48% would use Rancho Dr. to Teddy Dr. 10% of Rancho traffic going to the site would use Teddy Dr. and 38% only use Rancho. All of the outbound traffic would use Teddy Dr. So, 35% of the entering project traffic and 73% of the exiting project traffic is expected to use the Wyandotte/King/Teddy intersection. Total traffic at the intersection is expected to increase from 251 to 436 in the AM peak hour and from 223 to 463 in the PM peak hour. Delays at this intersection are expected to increase but remain acceptable. The worst intersection delay is in the AM peak hour, which will go from an average delay of 13.2 seconds (LOS B) to an average delay of 16.3 seconds (LOS B).

Wyandotte Street and Rancho Drive

The study assumed that of the 73% of the traffic going through the Sahara Ave./Rancho Dr. intersection, 48% would use Rancho Dr. to Teddy Dr. The 12% of traffic going to the south would also use Rancho. Total traffic at the intersection is expected to increase from 351 to 879 in the AM peak hour and from 396 to 1,390 in the PM peak hour. There is no intersection today. With the project, the worst delay is for the eastbound lefts (on Wyandotte to northbound Rancho Dr.), with an average delay of 73.5 seconds (LOS D). This is considered to be acceptable as the overall intersection delay is still low at 9.1 seconds (LOS A).

Sahara Avenue and Richfield Boulevard

The study showed that the intersection is currently operating adequately during the AM and PM peak hours, and will continue to do so with the project. However, at the November 15, 2022 Planning Commission meeting, residents voiced concerns that the northbound left currently backs up, with one resident indicating that it may be due to the Rex Bell ES drop-off/pick-up operations. City staff investigated this and confirmed that the northbound left does back up during the Rex Bell ES drop-off/pick-up operations, particularly the afternoon pick-up. This is due both to the increased vehicular volumes and to the increased pedestrian volumes, as pedestrians crossing Sahara Avenue can reduce the amount of time available for the northbound (and southbound) left turning movements. Transportation Engineering has worked with RTC-FAST to re-allocate 10 seconds of green time (from a 160 second cycle length) from the east-west movements to the north-south movements for the 2:00 PM to 7:00 PM timing pattern. It is anticipated that this will provide relief to the northbound left turn movement. City staff will continue to monitor the traffic at this intersection.