APPENDIX 3-1

PECOS ROAD LOCAL TRAFFIC CIRCULATION

Appendix 3-1, *Pecos Road Local Traffic Circulation,* presents an evaluation of impacts to local traffic operations in the Ahwatukee Foothills Village due to the construction and operation of the South Mountain Freeway.

DATE: February 3, 2006

TO: Thomas E. Callow
Senior Executive Assistant to the City Manager

FROM: J. Donald Herp
Deputy Street Transportation Director

SUBJECT: Pecos Road Local Traffic Circulation

The purpose of this memo is to document the results of an analysis of the use of Pecos Road for "internal" trips (both origin and destination within Ahwatukee). For the purposes of this analysis, all "internal" trips are assumed to be diverted to Chandler Boulevard with the construction of SR 202 L (South Mountain Freeway) along the Pecos Road alignment, although a few "internal" trips would use the freeway.

Pecos Road today is used primarily for trips with either an origin or destination outside of the Ahwatukee area. To estimate the use of Pecos Road by "internal" trips, traffic counts were made of the number of vehicles turning eastbound to northbound or southbound to westbound at the intersections of Pecos Road and 17th Avenue, Desert Foothills Parkway, 24th, 32nd and 40th Streets. These traffic movements are all assumed to be "internal" trips (both ends of the trip within the Ahwatukee community).

Manual turning movement counts were made during the morning (6:30 – 8:30) and afternoon (4:30 to 6:30) peak periods at these five intersections. The traffic volumes for the "internal" trips as a percentage of the total volumes on Pecos Road were calculated.

Using the percentage of "internal" trips found during the peak periods, the total daily "internal" trips were calculated on each segment of Pecos Road between Chandler Boulevard (26th Avenue alignment) and 40th Street.

Figure 1 shows the 2006 average weekday traffic volumes on the arterial streets and the estimated number of "internal" trips on each segment of Pecos Road. These trips are assumed to divert to Chandler Boulevard if the freeway is built on the Pecos Road alignment.

Figure 2 shows the estimated 2030 average weekday traffic volumes on the arterial streets without the South Mountain Freeway and the estimated number of "internal" trips on each segment of Pecos Road if the freeway is not built.

Figure 3 shows the estimated 2030 Average weekday traffic volumes on the arterial streets with the South Mountain Freeway and the estimated number of "internal" trips on each segment of Chandler Boulevard diverted from Pecos Road. (Note that this analysis assumes that there is no interchange at 32nd Street).

While the "internal" trips (as calculated in this analysis) will be diverted to Chandler Boulevard if the freeway is built along Pecos Road, these trips does not represent a significant percentage of the total Chandler Boulevard traffic volumes, and, with if the freeway is built on the Pecos Road alignment, Chandler Boulevard estimated traffic volumes in 2030 are less than if the freeway is not built.
.

cc: Mr. Blakley, Mr. Johnson

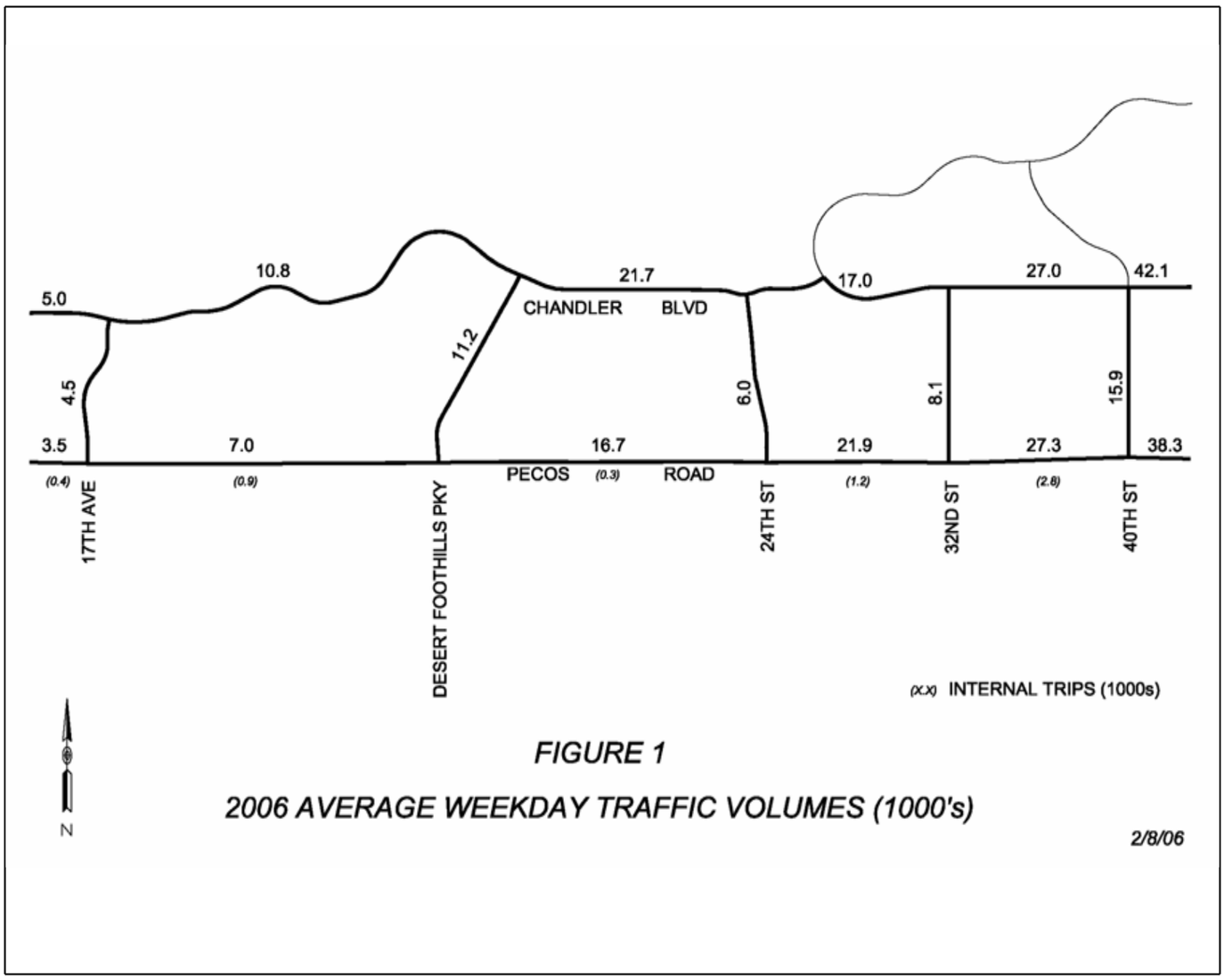


FIGURE 1

2006 AVERAGE WEEKDAY TRAFFIC VOLUMES (1000's)

2/8/06

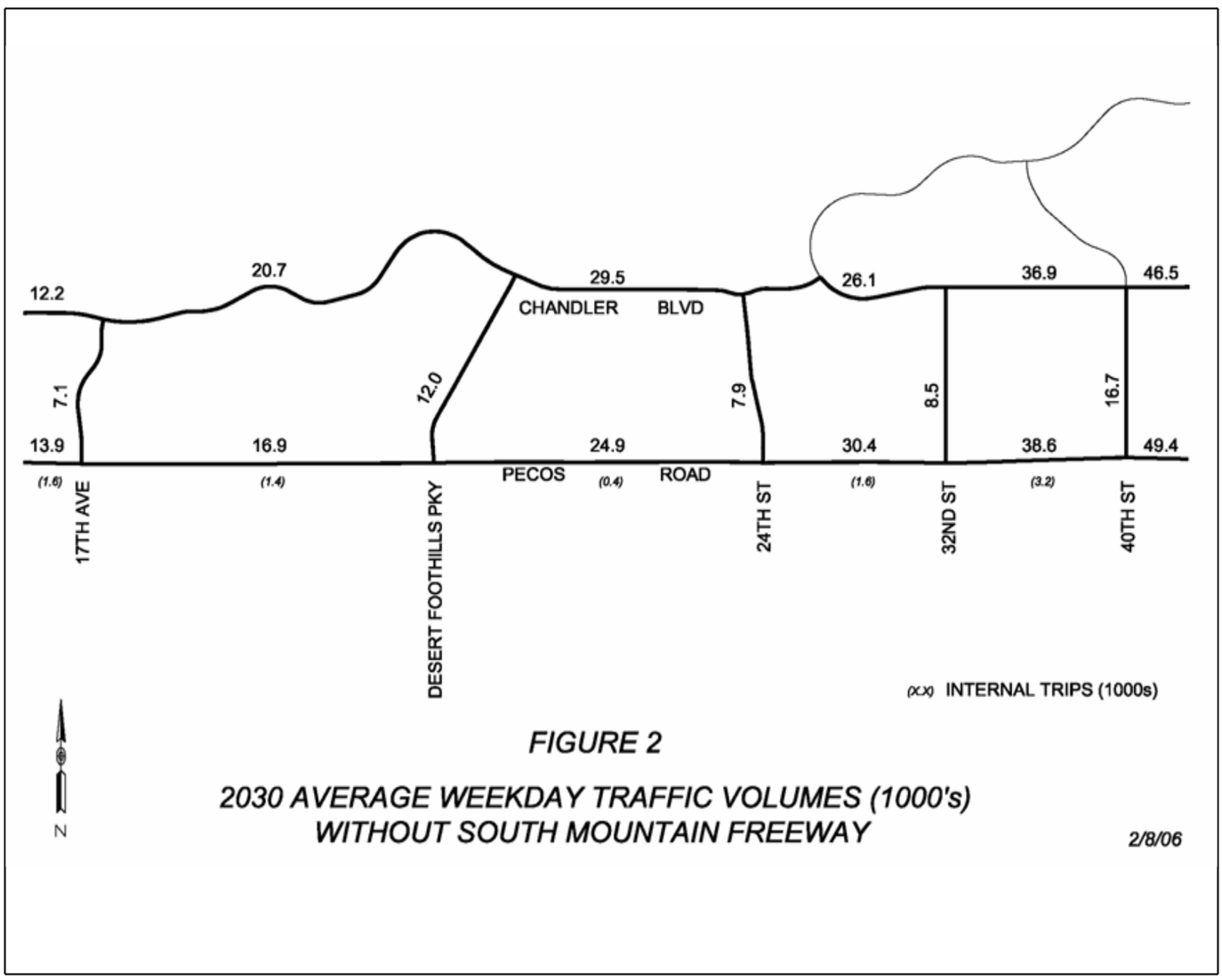
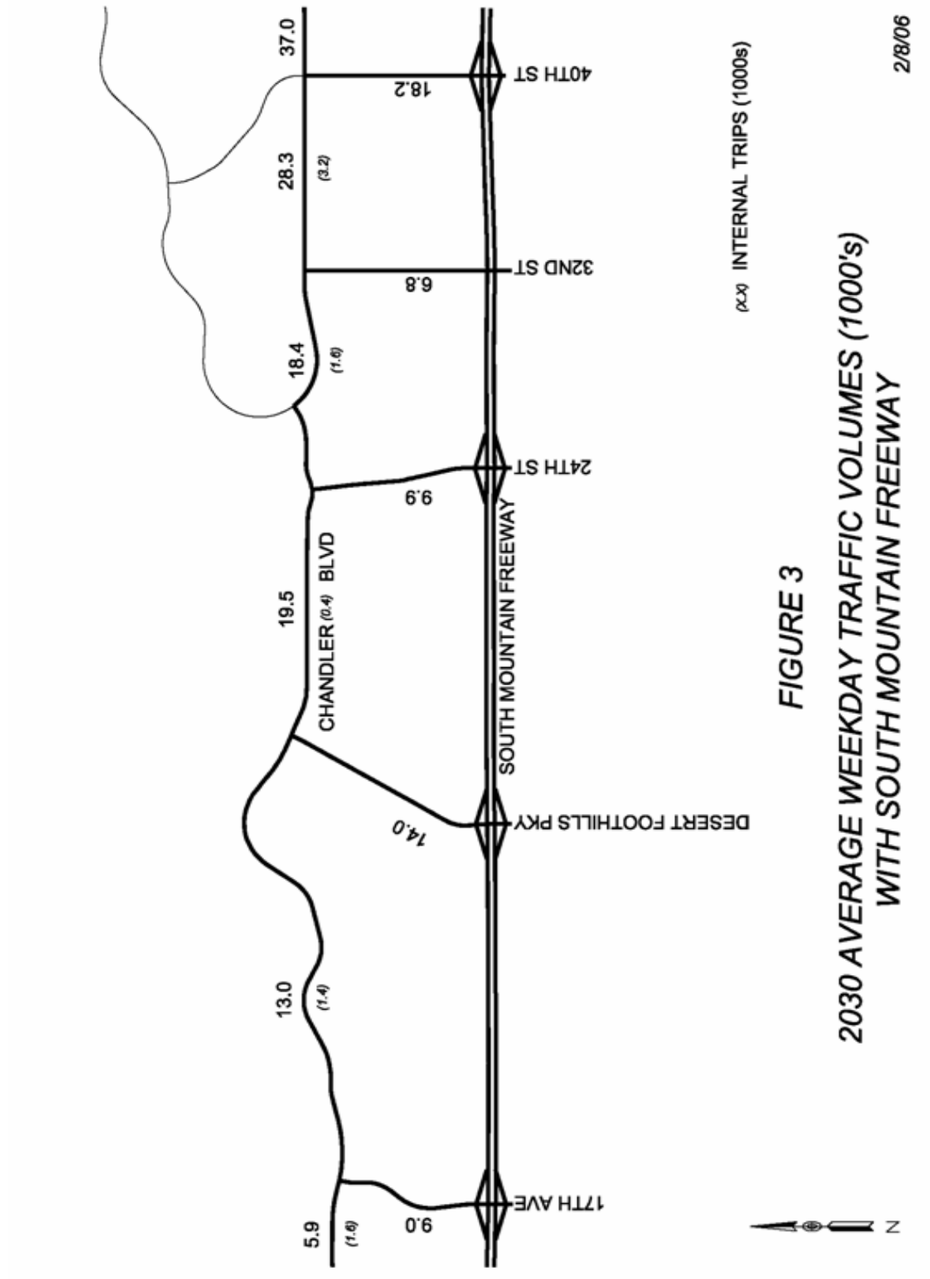


FIGURE 2

2030 AVERAGE WEEKDAY TRAFFIC VOLUMES (1000's)
WITHOUT SOUTH MOUNTAIN FREEWAY

2/8/06



This page intentionally left blank