

The traffic letter was updated with a buildout year of 2023 using a 2% background growth rate.

The pre-application notes for the project indicated that only project trip generation, a site circulation plan, and a vehicle queuing analysis at each access needed to be provided in a traffic study letter.

Further, analysis at the intersection of 32nd Avenue and Chambers Road was not provided as the Aurora TIS standards state that a TIS may be required where the site is estimated to generate 75 per hour at any time. This site expansion is not anticipated to generate more than 75 trips in any single hour.

2022-12-22 (DJK)

Build-out analysis? 2023, 2024 or 2025 should be considered with at min a 2% background traffic growth for a more conservative analysis of the proposed site conditions.

Additionally, no counts or analyses of the adjacent signal at 32nd & Chambers?

Aurora, Colorado

Site Plan / Contextual Site Plan (CSP)	Yes* if > 75 trips/ hour or unusual conditions	A traffic study or an abbreviated study may be required in conjunction with a site plan where the site is estimated to generate at least 75 trips per hour at any time of the day or where an unusual condition exists which warrants study (such as existing high volumes, high accident incidence, commercial connection to residential area, etc.).
Site Plan		A traffic study will normally not be required unless the

generation, trip or the proposed 32nd Avenue in an existing facility ice space. The

expansion project is proposed to add 9,282 square feet of service bays and 1,600 square feet of office space. Therefore, upon completion of the expansion, Penske will have a total of 19,098 square feet of service bays and 6,760 square feet of office space. A conceptual site plan for the Penske expansion is attached.

Regional access to Penske is provided by Interstate 70 (I-70) and Interstate 225 (I-225) while primary access is provided along 32nd Avenue. Direct access is provided by two existing full movement accesses along the south side of 32nd Avenue, approximately 550 feet and 850 feet east of Chambers Road.

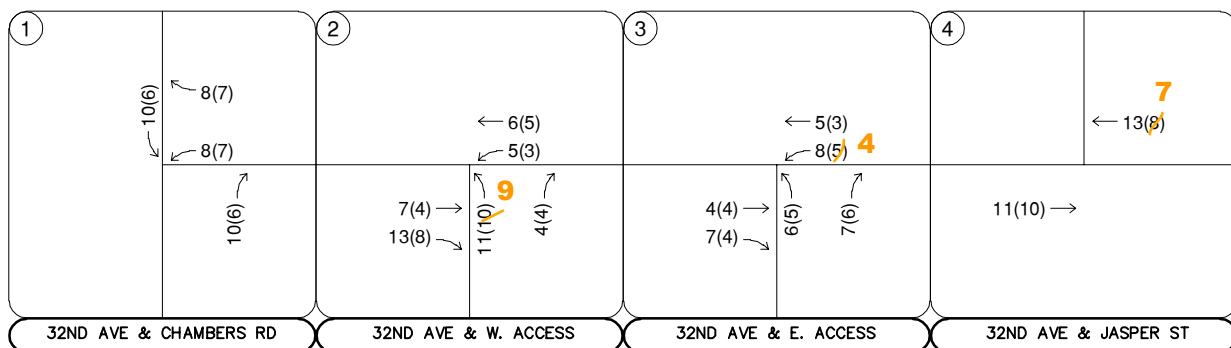
TRIP GENERATION

Site-generated traffic estimates are determined through a process known as trip generation. Rates and equations are applied to the proposed land use to estimate traffic generated by the development during a specific time interval. The acknowledged source for trip generation rates is the Trip Generation Manual¹ published by the Institute of Transportation Engineers (ITE). ITE has established trip rates in nationwide studies of similar land uses. However, the ITE Trip Generation Manual does not have a land use code applicable to the Penske Truck Leasing facility. Therefore, trip generation was based on existing counts collected entering and exiting the existing site (traffic counts attached). To provide a conservative analysis, the trip generation of the proposed expansion was assumed to be prorated to the service bay expansion, with an approximate 95 percent increase in that use size as compared to the office expansion being an approximate 31 percent increase in size. The following Table 1 summarizes the estimated trip generation for the Penske expansion.

¹ Institute of Transportation Engineers, *Trip Generation Manual*, Eleventh Edition, Washington DC, 2021.

95%
increase is
more
conservative

303 228 2300



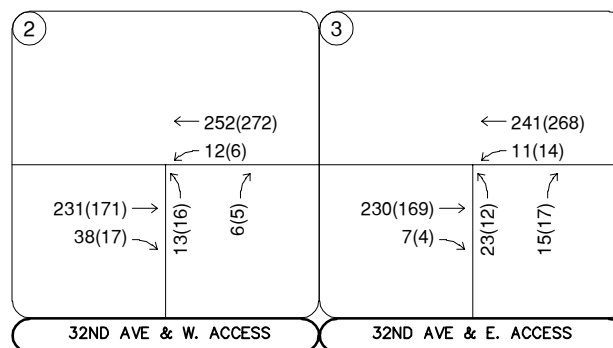
13+5+7+8=33 AM enter
11+4+6+7=28 AM exit totals 61 new AM trips
8+3+4+5=20(19) PM enter
10+4+5+6=25(24) PM exit totals 45 new PM trips

Some of these numbers were rounded up in the analysis software in the original submittal. Assignment was updated in the revised study.

LEGEND	
(X)	Study Area Key Intersection
XXX(XXX)	Weekday AM(PM) Peak Hour Traffic Volumes

PENSKE
AURORA, COLORADO
PROJECT TRAFFIC ASSIGNMENT

FIGURE 3



The AM traffic volumes are correct as they show 68 trips entering (38+12+7+11) and 57 trips exiting (13+6+23+15) for 125 total trips (68+57). The afternoon trips do not match the trip generation due to rounding in the analysis software, therefore these were updated to match the trip generation exactly.

38+12+7+11=68 AM enter
13+6+23+15=54 AM exit totals 122 AM trips
17+6+4+14=41 PM enter
16+5+12+17=50 PM exit totals 91 PM trips

Need to check math/percentages, not matching trip gen chart

PENSKE
AURORA, COLORADO
EXISTING PLUS PROJECT
TRAFFIC VOLUMES (ACCESS)

LEGEND	
(X)	Study Area Key Intersection
XXX(XXX)	Weekday AM(PM) Peak Hour Traffic Volumes

FIGURE 4