

## Traffic Impact Study

Signal doesn't look to be warranted in 2026. Only 50% of the right turn volume counts for the Minor approach volume.

The study has been updated to only include 50% of the minor street right-turning vehicles. See below for additional comment responses.

# QuikTrip 4283

Aurora, Colorado

Prepared for:

**QuikTrip Corporation**

**Kimley»Horn**

T R A F F I C I M P A C T S T U D Y

**QuikTrip 4283**

Aurora, Colorado

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## Signal Warrant Calculations

### 2026 Total AM

Mainline Traffic Volumes (Total of Both Approaches)	
241	EBL
402	EBT
226	EBR
59	WBL
144	WBT
60	WBR
<b>1132</b>	<b>Total</b>

Minor Street Approach (Northbound Approach)	
222	NBL
1	NBT
56	NBR
<b>279</b>	<b>Total</b>

Minor Street Approach (Southbound Approach)	
14	SBL
1	SBT
57	SBR
<b>72</b>	<b>Total</b>

% of Traffic Applied in an Hour	100%	90%
Major - Total of Both Approaches	1132	1019
Minor - High Volume Approach	279	251

Aurora only counts 50% of the right turn movement should be 28

Minor street right-turns have been updated.

### 2026 Total PM

Mainline Traffic Volumes (Total of Both Approaches)	
62	EBL
165	EBT
187	EBR
47	WBL
470	WBT
16	WBR
<b>947</b>	<b>Total</b>

Minor Street Approach (Northbound Approach)	
192	NBL
1	NBT
51	NBR
<b>244</b>	<b>Total</b>

Minor Street Approach (Southbound Approach)	
59	SBL
1	SBT
235	SBR
<b>295</b>	<b>Total</b>

% of Traffic Applied in an Hour	100%	90%
Major - Total of Both Approaches	947	852
Minor - High Volume Approach	295	266

219 26

178 118

219 197

Provide note that states where the 90% came from. From the counts it looks close in the AM and Mid day peak.

Clarification has been provided in the signal warrant analysis regarding the 90% factor used here. As mentioned within the text of the report previously, the 1st and 2nd peak hours used in the analysis are based on the 2026 AM and PM Total volumes, while the 3rd and 4th peak hours assume a 90% factor of the AM and PM peak hour volumes, respectively. This is based on the assumption that for an hour before/after the peak hours listed--for example, if AM commuter peak hour is 7:00-8:00 AM, the following hour 2026 horizon year 8:00-9:00 AM hour is assumed to have 90% of the traffic volume that occurred during the morning peak hour, with the same process followed in the afternoon peak period. A signal is still warranted based on the updated analysis with only including 50% of the right-turn minor street volume.