KITTELSON & ASSOCIATES
[address redacted] Suite 600
[address redacted]
[phone redacted]

TECHNICAL MEMORANDUM

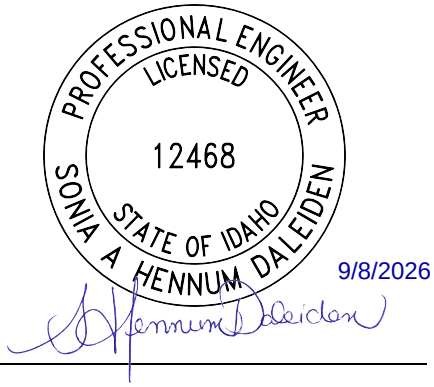
September 8, 2026 Project# 33922

To: Jennifer Zhung
Harmony Desing & Engineering
18 N Main Street Suite 305
Driggs, ID 83422

From: Justin Delgado, Sonia Daleiden, PE, PTOE

CC: Tom Hedges

RE: Spud Drive-in



Introduction

Kittelson & Associates, Inc. (Kittelson) has prepared this turn lane and queuing assessment for the proposed Spud Drive-In development in Teton County, Idaho. This analysis provides the information requested by a comment from ITD D6 staff on the development's application.

This analysis was prepared in accordance with Teton County and Idaho Transportation Department (ITD) requirements, including methodologies to grow background volumes, determine trip generation rates, and calculate the ratio of site-generated trips relative to overall intersection volumes.

SCOPING THE STUDY

All assumptions documented in this memorandum were shared with and confirmed as acceptable by ITD in late August/early September of 2026. *Appendix A includes the scoping email and confirmation with the department.*

PROJECT DESCRIPTION

The Spud Drive-In development is proposed to be located at its historic site off SH-33, southeast of the SH-33 / W 2000 S intersection, north of the existing MD Nursery & Landscaping plot. The current application proposes the reconstruction of the drive-in theater with onsite trailer lodging, and restaurant. Figure 1 displays the proposed development site plan.

Site Access A referenced herein refers to the local road access on the northern boundary of the site, and Site Access B refers to the exit onto SH-33 central to the site.

Figure 1. Proposed Development Site Plan



Turn Lane Assessment

The need for turn lanes at the site access to SH 33 were evaluated based on scoping discussions with ITD staff and ITD turn lane warrants.

PEAK HOUR ASSESSMENT SELECTION

The development's expected peak season is summer with peak attendance expected on either Friday and Saturday evenings. Based on a review of SH-33 Automatic Traffic Recorder (ATR) 239 counts, Friday saw a higher average AADT than Saturday. As such and to be conservative, an average Friday evening in July was assumed to be the peak season and peak hour for study. Kittelson completed this analysis for two scenarios:

1. During the Friday peak hour of adjacent street traffic on SH 33 with development trips.
2. During the Friday peak hour of the generator (development) which is slightly later than the Friday peak hour on SH 33.

Peak Hour of Adjacent Traffic with Development Trips

In this scenario the estimated peak hour on SH 33 is expected to be 6:30-7:30pm. This period coincides with the main arrival period of attendees for the first showing of a movie during the summer. Summer movies are expected to start at 8:00pm with attendees required to arrive at least 30 minutes prior to start time. The absolute peak hour of SH-33 itself was not analyzed as it is earlier in the day and does not overlap with the times when the theater, lodging, or restaurant on site would have significant operations.

The developer expects pre-show live music/events that people will want to attend before the movie. The on-site restaurant will operate during the pre-show and movie.

Peak Hour of the Generator

The development's peak trip generation period is expected to be the overlap between the first showing ending and second showing beginning. This is assumed to be 9:15-10:15pm. While volumes on SH-33 are assumed to be higher during the peak hour of adjacent street traffic with development trips (6:30-7:30 pm), this scenario was reviewed for a comprehensive analysis.

TRIP GENERATION

Given the unique nature of the land use and historic operations of the theater, it was determined a custom trip generation needed to be developed for the site. Trip generation was based on drive-in parking occupancy's relationship to vehicle trips. Based on conversations with the developer and historical attendance, the following vehicle arrival and departure characteristics were developed for each scenario:

- **Peak hour of adjacent street traffic with development trips:**
    - Assume 60% of lodging parking arrivals during the peak period (10 trips entering)

    - Assume 90% of theater occupancy with all arrivals during the peak period (134 trips entering)
        - Assume no additional restaurant specific trips in the peak period, staff will arrive early and leave late, and partons arriving during the peak period are captured in the lodging and theater arrivals.
- **Peak hour of the generator:**
    - Assume 50% of theater occupancy with all arrivals during the peak period (75 trips entering)
    - Assume 80% of theater occupancy with all departures during the peak period (119 trips leaving)
        - Assume no additional restaurant specific trips in the peak period, staff will arrive early and leave late, and partons during the peak period are captured in theater arrivals

Table 1 summarizes the estimated trip generation based on the above assumptions.

Table 1. Estimated Trip Generation

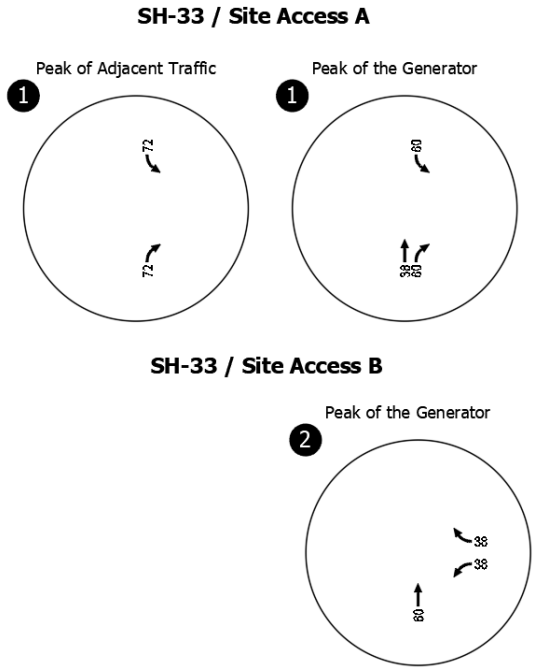
Analysis Period	Total	In	Out
Peak Hour of Adjacent Traffic with Development Trips	144	144	0
Peak Hour of the Generator	194	119	75

As shown in Table 1, conservatively the development is expected to generate a total of approximately 144 net new daily (all into the site) trips during the peak hour of adjacent street traffic with development, and 194 trips during the peak hour of the generator (119 in and 75 out). These vehicles were all assumed to enter the site via site access A and leave via site access B.

TRIP DISTRIBUTION AND ASSIGNMENT

For the purposes of distributing trips, 50% of vehicles were assumed to be traveling to/from the north on SH-33, and 50% of vehicles were assumed to be traveling to/from the south on SH-33.

Figure 2 Trip Assignment



EXISITNG TRAFFIC VOLUMES

Existing Traffic Volume Count Collection

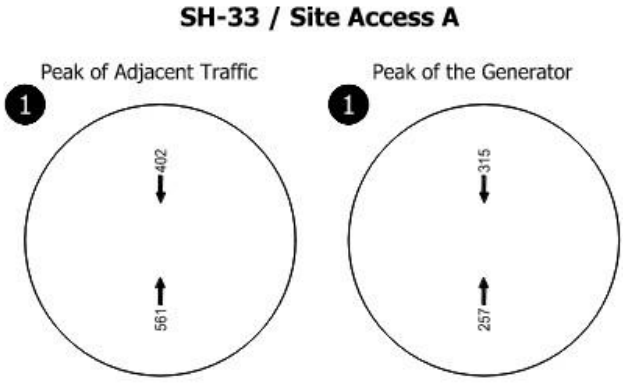
Kittelson utilized peak season (July) counts from ATR 239 (located >500 feet south of the site) to obtain peak hour directional volumes on SH-33 for the time periods identified in the previous sections. Four Friday counts were obtained from the ATR including July 10th, 17th, 24th, and 31st. Directional (northbound and southbound) volumes were averaged for the two study time periods across the four days to derive typical Friday evening volumes on SH-33.

The Friday prior to July 4th was omitted due to holiday travel impacts. No seasonal adjustment factor was applied as the counts occurred during the peak month of the peak season.

Turning movement counts were not collected and the anticipated site access points. This was due to the assumption that based on surrounding land uses no or very few turning movements would occur under existing conditions during the peak hours identified in the above section. *All traffic counts used in this analysis are found in Appendix B.*

Following the process described above, Figure 3 shows the existing conditions volumes for 2026 on SH-33.

Figure 3. Existing Traffic Volumes on SH-33



BUILD OUT 2027 CONDITIONS

The Spud Drive-In is expected to open in 2027 and one year of background growth was applied to existing counts to reflect the build out date.

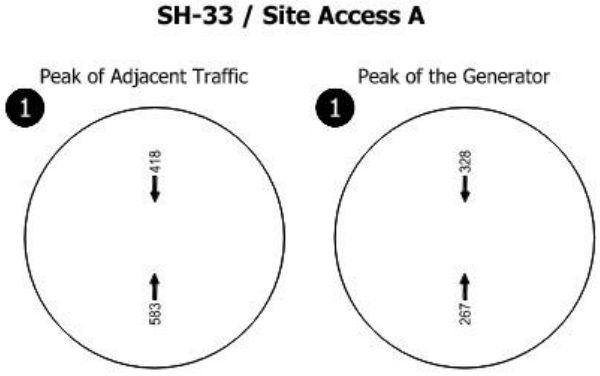
GROWING EXISTING TRAFFIC

The traffic volumes at both intersections shown in Figure 3 were grown at an annual compounded growth rate of 4%, for 1 year, to the expected build out date of 2027. This growth rate is reflected in year-over-year trends experienced on SH-33's ATRs and has been accepted by ITD, City of Victor, Teton County, and City of Driggs in recent Transportation Impact Studies in the area.

Background Traffic Volumes

Figure 4 shows traffic volumes at SH-33 / Site Access A during the peak hour of adjacent street traffic with development and peak hour of the generator (excluding site-generated trips).

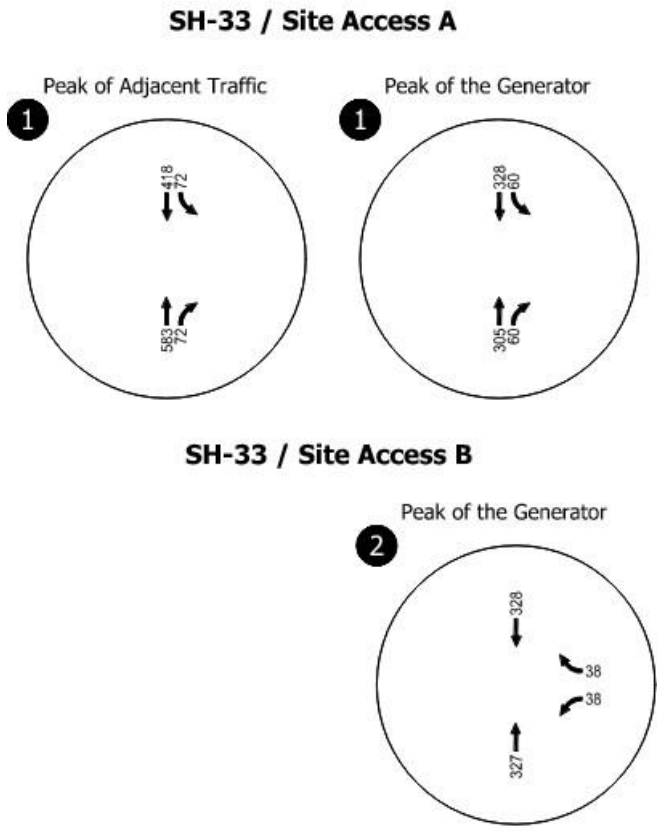
Figure 4. Background Traffic Volumes on SH-33



Total Traffic Volumes

Figure 5 shows traffic volumes at SH-33 / Site Access A and SH-33 / Site Access B during the two study time periods, including 2027 background volumes and site-generated traffic combined to shown 20207 total traffic volumes.

Figure 5. Total Traffic Volumes at Site Access Intersections



TURN LANE ASSESSMENT

The need for turn lanes was assessed at the intersection of SH-33/ Site Access A under the peak hour of adjacent street traffic scenario. Table 2 summarizes the results of the turn lane assessment.

Table 2. SH-33 / Site Access A Turn Lane Assessment

Intersection	Turn Lane Assessed	Turn Lane Warranted?
SH-33 / Site Access A	Southbound Left[1]	**Yes**
	Northbound Right[2]	**Yes**

[1]Based on Section 3 of the ITD Manual
[2]Based on AASHTO Greenbook section 9.7.3

As summarized in Table 2 both left and right turns lanes are warranted at the site access A intersections. Note this is based on peak hour, peak season analysis results that would occur on the summer Friday peak hour with an assumed 90% capacity attendance at the development. *Turn Lane warrant sheets are located in Appendix C*.

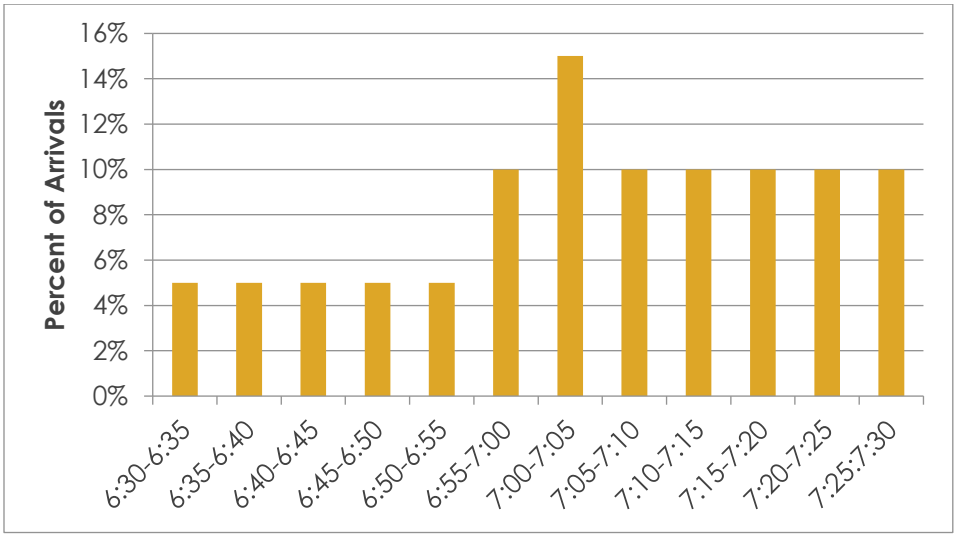
Development Arrival Queueing Assessment

During scoping confirmations, ITD requested an evaluation of entry queuing towards SH-33 during arrivals at Site Access A. Approximately 400ft of storage space is available for vehicles to queue between the drive-in entry and SH 33. Assuming 25 feet per vehicle (conservative value to account for buffer space between vehicles) this would allow 16 vehicles to queue at the entrance at any one time before spilling back onto SH-33.

Peak arrivals to the site are expected during the peak hour of adjacent street traffic with development scenario. During this one-hour period, 144 vehicles are expected to enter the site. In Kittelson's conversation with the project team indicated that attendees will purchase tickets online prior to arrival and will simply have to scan a QR code to gain entry to the site. While this may eventually be the case as regular attendees familiarize themselves with the process, the queueing analysis presented herein is based on conservative assumptions that would indicate near worst case queuing conditions.

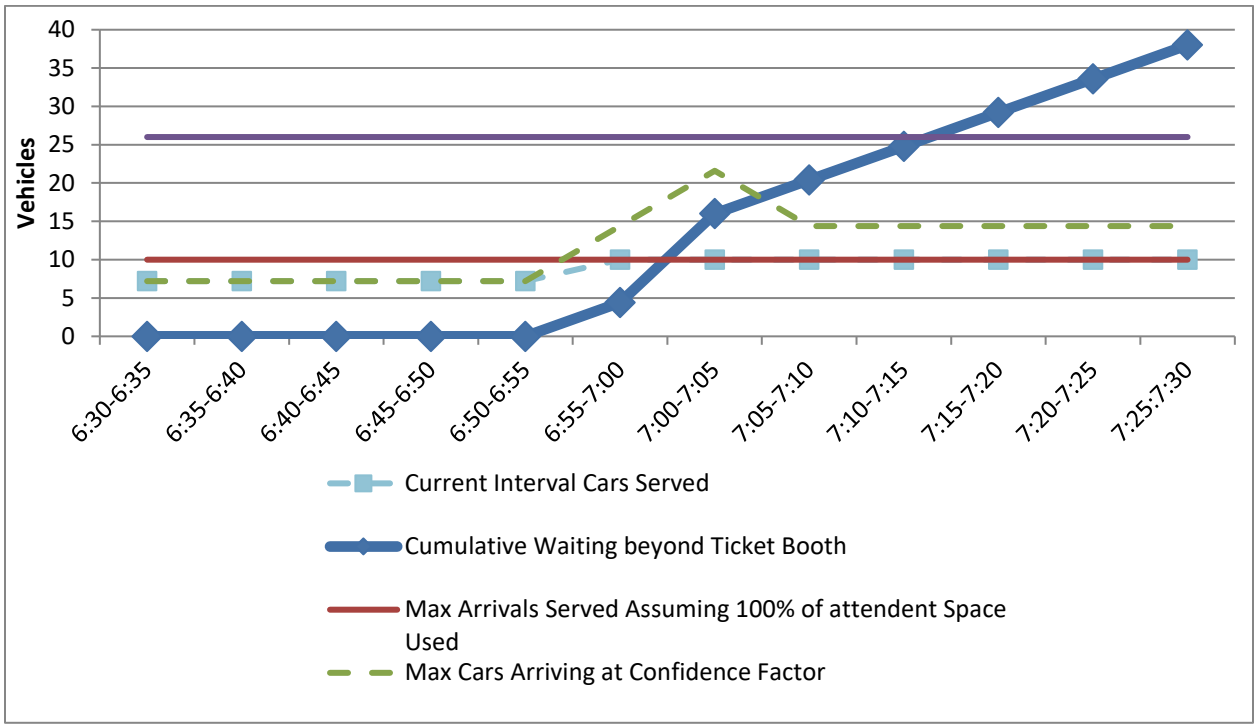
To develop maximum queue length at the site, Kittelson utilized an excel tool statistical queuing model. This tool has been applied to projects to assess queuing impacts and has been accepted by agencies across the state. The tool's function relies on input assumptions including average service time and a percent arrival profile for the hour. Kittelson developed a conservative estimate for both, with service time estimated at an average of 30 seconds per vehicle and an arrival profile viewable in Figure 6 below.

Figure 6 Hourly Vehicle Arrival Profile



The results of this analysis found that under conservative conditions (un-uniform arrival period, 30 second service time, and high site utilization) a max queue of 38 vehicles could be expected. The results of this analysis are shown in Figure 7. *Raw excel results are included in Appendix D.*

Figure 7 Queuing Analysis – Peak Hour of Adjacent Traffic with Development

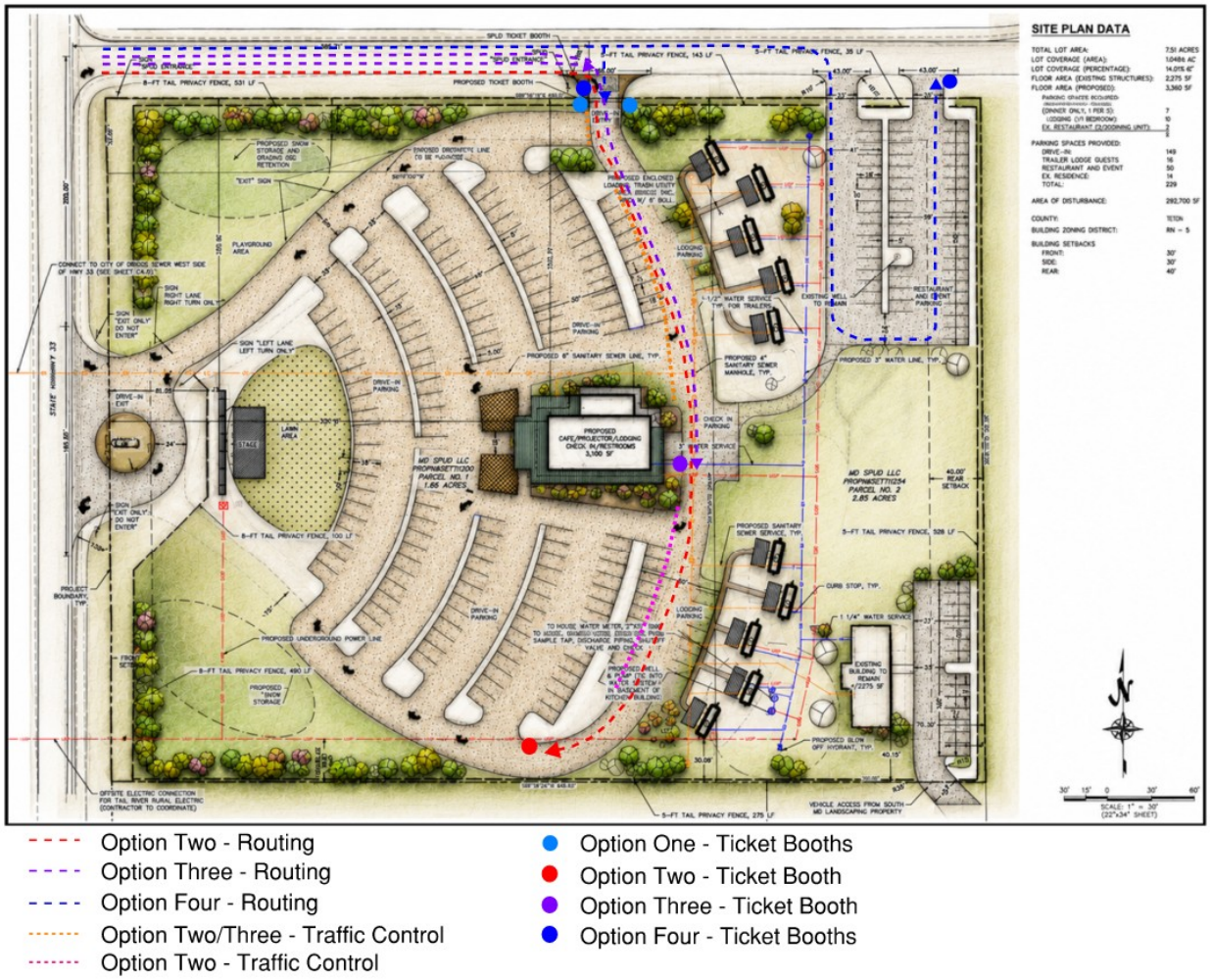


The results of this analysis indicate that the function of the site as currently proposed would be unable to adequately store vehicle queues "on-site" and queues could spill back onto SH-33. To mitigate potential queueing issues, several mitigations are available:

- Option One: Utilize two ticket booths and both lanes at the entrance to the site. Pre-pay attendees could access both booths, and entrants paying at the entrance could only pay at one of the booths.
    - Reanalyzing queues with two attendant spaces (rather than one) reduces expected max queues down to two vehicles which can be comfortably accommodated in the existing 400ft of storage estimated on the local road.
- Option Two: Move the proposed ticket booth farther into the site and utilize cones on site to direct traffic so that ~900ft of storage space is available for vehicles to queue should that much space be needed.
- Option There: Utilize two queueing lanes on the local road entering the site and relocate the proposed ticket booth farther into the site (not as far as option two).
- Option Four: Have vehicles we pre-purchased tickets enter the site directly from the access but have vehicles without pre-purchased tickets route east through the restaurant and event parking to purchase a ticket and then circle back to enter the site where pre-purchased ticket holders enter.

Figure 8 depicts the queue mitigation strategies overlayed onto the site plan.

Figure 8 Queue Mitigation Strategies



It should be noted that the results of this analysis are heavily reliant on the estimated service time input, which may decrease with time or function more efficiently than estimated in this analysis. As the development opens, service time and queues should be monitored to determine if actions varying from recommendations in this memorandum are necessary, or if none of the recommendations presented in this memorandum are needed due to high pre-purchase ticket sales and a much shorter average service time than assumed in this analysis.

Appendix

A. Scoping and Confirmations
B. Traffic Counts
C. Turn Lane Warrant Sheets
D. Queuing Worksheet

Appendix A Scoping and Confirmation

Justin Delgado

From: Jeffrey Rawson <Jeffrey.Rawson@itd.idaho.gov>
Sent: Thursday, September 3, 2026 1:55 PM
To: Justin Delgado
Cc: Karen Hiatt
Subject: RE: Cost Estimate for Proportional Share Calculation

[External Sender]

Justin,

Thank you for submitting this for ITD's review. For the most part your strategy on collecting data on the TIS is good.
However, based on our research, drive-ins queuing of people arriving is the biggest traffic congestion. ITD wants to see the number of vehicle spots and how much queuing length would be needed for those cars to arrive in a thirty-minute period.
Based off our calculations the amount of queuing space is inadequate for the amount of traffic during peak hours. Additional queuing would need to be addressed in the roadway improvements.

Hope this helps move you forward.

Thank you,

Jeff Rawson
Permits Coordinator

Work: [phone redacted]

Email: Jeffrey.rawson@itd.idaho.gov

Website: *itd.idaho.gov*

From: Justin Delgado [email redacted]
Sent: Thursday, September 3, 2026 8:06 AM
To: Jeffrey Rawson <Jeffrey.Rawson@itd.idaho.gov>
Subject: RE: Cost Estimate for Proportional Share Calculation

CAUTION: This email originated outside the State of Idaho network. Verify links and attachments BEFORE you click or open, even if you recognize and/or trust the sender. Contact your agency service desk with any concerns.

Jeff,

Thank you, I appreciate your quick attention to this.

Regards,

Justin Delgado
Transportation Planner

Kittelson & Associates, Inc.
Transportation Engineering & Planning
[address redacted] Suite 600
[address redacted]
[phone redacted]
[phone redacted] (direct)

From: Jeffrey Rawson <Jeffrey.Rawson@itd.idaho.gov>
Sent: Thursday, September 3, 2026 7:00 AM
To: Justin Delgado [email redacted]
Subject: RE: Cost Estimate for Proportional Share Calculation

[External Sender]

Hey Justin,

I will speak with my traffic engineer today and let you know what we come up with.

Jeff Rawson
Permits Coordinator

Work: [phone redacted]

Email: Jeffrey.rawson@itd.idaho.gov

Website: *itd.idaho.gov*

From: Justin Delgado [email redacted]
Sent: Wednesday, September 2, 2026 4:11 PM

To: Jeffrey Rawson <Jeffrey.Rawson@itd.idaho.gov>
Subject: RE: Cost Estimate for Proportional Share Calculation

CAUTION: This email originated outside the State of Idaho network. Verify links and attachments BEFORE you click or open, even if you recognize and/or trust the sender. Contact your agency service desk with any concerns.

Jeff,

Sorry to bug you on this, but I just learned that the Spud Drive-In is going back before the Commission in two weeks and they need materials next week. Are you able to take a quick look at the proposed approach for our turn lane analysis by end of day tomorrow?

I apologize for the rushed request here. Feel free to call me if you have any questions or want to talk through the approach.

Regards,

Justin Delgado
Transportation Planner

Kittelson & Associates, Inc.
Transportation Engineering & Planning
[address redacted] Suite 600
[address redacted]
[phone redacted]
[phone redacted] (direct)

From: Justin Delgado
Sent: Monday, August 31, 2026 3:48 PM
To: 'Jeffrey Rawson' <Jeffrey.Rawson@itd.idaho.gov>
Cc: Sonia Daleiden [email redacted]
Subject: RE: Cost Estimate for Proportional Share Calculation

Jeff,

Thank you for sharing, I will let you/Kyle know if I have questions on the cost estimate in the next couple days. I do have another series of questions for a separate effort I was hoping to get your thoughts on.

We have been brought on to support the turn lane analysis that you requested of the proposed Spud Drive-in theater in Teton County. I want to make sure ITD is comfortable with how we propose to conduct this analysis. Below is our proposed approach please let me know if you have comments, or find the approach acceptable:

Approach

- Peak Hour Selection:

- We propose to complete this analysis for two scenarios, during the peak hour of adjacent street traffic with development trips, and during the peak hour of the generator. The development's

expected peak season is summer with peak attendance Friday or Saturday evening. Based on SH-33 counts, Friday appears to have a higher average AADT, an average Friday evening in July is assumed to be the peak season date of study.

- Peak hour of adjacent street traffic with development trips
  - In this scenario the estimated peak hour is expected to be ~6:30-7:30pm.
    - This time period coincides with the main arrival period of attendees for the first showing of a movie during the summer. Summer movies are expected to start at 8:00pm with attendees required to arrive at least 30 minutes prior to start time.
      - *The developer expects pre-show live music/events that people will want to attend before the movie*.
      - *The on-site restaurant will operate during the pre-show and movie*.
- Peak hour of the generator
  - The development's peak trip generation period is expected to be the overlap between the first showing ending and second showing beginning. This is assumed to be ~9:15-10:15pm.

- Trip Generation:

- Peak hour of adjacent street traffic with development trips
  - Assume 60% of lodging parking arrivals during the peak period(10 trips entering)
  - Assume 90% of theater occupancy with all arrivals during the peak period (134 trips entering)
    - *No additional restaurant specific trips are assumed in the peak period, staff will arrive early and leave late, and partons arriving during the peak period are captured in theater arrivals*.
  - **144 total trips entering – 0 exiting**
- Peak hour of the generator
  - Assume 50% of theater occupancy with all arrivals during the peak period (75 trips entering)
  - Assume 80% of theater occupancy with all departures during the peak period (119 trips leaving)
    - *Assume no additional restaurant specific trips in the peak period, staff will arrive early and leave late, and partons during the peak period are captured in theater arrivals*.
  - **75 total trips entering – 119 exiting**

-Count Collection:

- We propose to utilize peak season (July) counts from ATR 239 (located >500 feet south of the site) to obtain peak hour directional volumes on SH-33 for the time periods identified in the previous sections.
- We propose not collecting turning movement counts at the existing local road that will serve as the primary access to the development. proposed local road access.
  - *It is our assumption that based on surrounding land uses very few vehicle trips under existing conditions will occur during the peak hours identified in the above section*.

-Trip Distribution:

- Assume 50% to/form the north towards Driggs, and 50% to and from the south towards Victor.
  - *Driggs is more populous but NB volumes are higher on SH-33 during this time of day*.

-Background Growth:

- Grow SH-33 Counts by 4% per year to build out date (*Date TBD – need to connect with developer*)

-Analysis:

- Warrants will be based off the following:
    - Right turn warrants in section 3 of the ITD Traffic Manual.
    - Left turn warrants in the AASHTO green book section 9.7.3

If you have any questions that are easier to talk through via phone, feel free to give me call at the direct number in my email signature.

Regards,

Justin Delgado
Transportation Planner

Kittelson & Associates, Inc.
Transportation Engineering & Planning
[address redacted] Suite 600
[address redacted]
[phone redacted]
[phone redacted] (direct)

From: Jeffrey Rawson <Jeffrey.Rawson@itd.idaho.gov>
Sent: Tuesday, August 25, 2026 12:21 PM
To: Justin Delgado [email redacted] ; Dalton Rice <Dalton.Rice@itd.idaho.gov>
Cc: Sonia Daleiden [email redacted] ; Andrew Mancini [email redacted]
Subject: RE: Cost Estimate for Proportional Share Calculation

[External Sender]

Justin,

This is what I received from the project engineer Kyle Huebner. If you have any questions moving forward let me or Kyle know his email and number is found below.

Thank you,

Jeff Rawson
Permits Coordinator

Work: [phone redacted]

Email: Jeffrey.rawson@itd.idaho.gov

Website: *itd.idaho.gov*

Jeff,

Appendix B Traffic Counts

Location Info	
Location ID	00239_NB
Type	I-SECTION
Functional Class	4
Located On	SH 33 MAIN
	SH-33 0.4 Mi. S of Darby Rd
Direction	NB
Community	-
MPO_ID	
HPMS ID	
Agency	Idaho Transportation Department

Count Da	
Start Date	
End Date	
Start Time	
End Time	
Direction	
Notes	
Count Source	
File Name	
Weather	
Study	
Owner	
QC Status	

Interval: 15 mins

Time	15 min				Hourly Count
	1st	2nd	3rd	4th	
00:00 - 01:00	13	5	9	6	33
01:00 - 02:00	4	3	2	1	10
02:00 - 03:00	1	0	3	3	7
03:00 - 04:00	2	1	1	1	5
04:00 - 05:00	1	6	2	3	12
05:00 - 06:00	8	10	12	26	56
06:00 - 07:00	31	24	46	85	186
07:00 - 08:00	70	74	59	154	357
08:00 - 09:00	141	139	125	152	557
09:00 - 10:00	127	142	131	157	557
10:00 - 11:00	145	122	128	165	560
11:00 - 12:00	128	145	133	162	568
12:00 - 13:00	147	154	132	151	584
13:00 - 14:00	142	153	142	159	596
14:00 - 15:00	121	155	153	180	609
15:00 - 16:00	167	142	166	187	662
16:00 - 17:00	159	166	187	198	710
17:00 - 18:00	174	192	213	189	768
18:00 - 19:00	160	157	172	142	631
19:00 - 20:00	139	135	137	109	520
20:00 - 21:00	87	85	91	83	346
21:00 - 22:00	82	68	52	57	259
22:00 - 23:00	51	58	60	56	225
23:00 - 24:00	32	30	18	27	107
TOTAL					8925

ata Info
7/10/2026
7/11/2026
12:00 AM
12:00 AM
tonygrange
Accepted

Location Info	
Location ID	00239_NB
Type	I-SECTION
Functional Class	4
Located On	SH 33 MAIN
	SH-33 0.4 Mi. S of Darby Rd
Direction	NB
Community	-
MPO_ID	
HPMS ID	
Agency	Idaho Transportation Department

Count Da	
Start Date	
End Date	
Start Time	
End Time	
Direction	
Notes	
Count Source	
File Name	
Weather	
Study	
Owner	
QC Status	

Interval: 15 mins					
Time	15 min				Hourly
	1st	2nd	3rd	4th	Count
00:00 - 01:00	21	11	7	3	42
01:00 - 02:00	4	5	1	3	13
02:00 - 03:00	4	1	1	0	6
03:00 - 04:00	0	1	1	1	3
04:00 - 05:00	2	5	3	5	15
05:00 - 06:00	10	8	15	25	58
06:00 - 07:00	18	37	62	93	210
07:00 - 08:00	86	72	87	111	356
08:00 - 09:00	119	127	146	178	570
09:00 - 10:00	136	117	119	133	505
10:00 - 11:00	141	118	130	144	533
11:00 - 12:00	140	130	144	130	544
12:00 - 13:00	141	133	136	145	555
13:00 - 14:00	116	127	115	125	483
14:00 - 15:00	147	135	134	149	565
15:00 - 16:00	174	130	137	134	575
16:00 - 17:00	152	157	165	156	630
17:00 - 18:00	143	164	129	155	591
18:00 - 19:00	194	140	133	133	600
19:00 - 20:00	141	145	113	113	512
20:00 - 21:00	117	96	102	81	396
21:00 - 22:00	70	62	59	66	257
22:00 - 23:00	49	65	50	47	211
23:00 - 24:00	47	32	24	22	125
TOTAL					8355

ata Info
7/17/2026
7/18/2026
12:00 AM
12:00 AM
tonygrange
Accepted

Location Info	
Location ID	00239_NB
Type	I-SECTION
Functional Class	4
Located On	SH 33 MAIN
	SH-33 0.4 Mi. S of Darby Rd
Direction	NB
Community	-
MPO_ID	
HPMS ID	
Agency	Idaho Transportation Department

Count Da
Start Date
End Date
Start Time
End Time
Direction
Notes
Count Source
File Name
Weather
Study
Owner
QC Status

Interval: 15 mins					
Time	15 min				Hourly
	1st	2nd	3rd	4th	Count
00:00 - 01:00	15	19	15	11	60
01:00 - 02:00	7	4	5	2	18
02:00 - 03:00	0	0	1	2	3
03:00 - 04:00	3	0	1	3	7
04:00 - 05:00	1	6	7	4	18
05:00 - 06:00	5	5	19	30	59
06:00 - 07:00	25	37	65	91	218
07:00 - 08:00	57	75	83	117	332
08:00 - 09:00	105	138	146	155	544
09:00 - 10:00	113	109	156	139	517
10:00 - 11:00	145	151	144	179	619
11:00 - 12:00	122	137	125	134	518
12:00 - 13:00	152	150	149	137	588
13:00 - 14:00	150	152	138	153	593
14:00 - 15:00	135	156	133	172	596
15:00 - 16:00	117	174	175	157	623
16:00 - 17:00	163	164	157	159	643
17:00 - 18:00	167	168	181	181	697
18:00 - 19:00	182	164	163	133	642
19:00 - 20:00	157	129	129	130	545
20:00 - 21:00	121	105	79	118	423
21:00 - 22:00	92	95	78	59	324
22:00 - 23:00	60	52	40	37	189
23:00 - 24:00	36	38	29	11	114
TOTAL					8890

ata Info
7/24/2026
7/25/2026
12:00 AM
12:00 AM
tonygrange
Accepted

Location Info	
Location ID	00239_NB
Type	I-SECTION
Functional Class	4
Located On	SH 33 MAIN
	SH-33 0.4 Mi. S of Darby Rd
Direction	NB
Community	-
MPO_ID	
HPMS ID	
Agency	Idaho Transportation Department

Count Da
Start Date
End Date
Start Time
End Time
Direction
Notes
Count Source
File Name
Weather
Study
Owner
QC Status

Interval: 15 mins					
Time	15 min				Hourly
	1st	2nd	3rd	4th	Count
00:00 - 01:00	10	18	7	4	39
01:00 - 02:00	3	4	4	3	14
02:00 - 03:00	2	2	1	0	5
03:00 - 04:00	1	1	2	4	8
04:00 - 05:00	4	2	8	8	22
05:00 - 06:00	8	13	14	22	57
06:00 - 07:00	17	31	55	77	180
07:00 - 08:00	63	79	115	120	377
08:00 - 09:00	138	141	116	145	540
09:00 - 10:00	130	138	118	138	524
10:00 - 11:00	126	147	146	119	538
11:00 - 12:00	128	141	117	157	543
12:00 - 13:00	132	107	127	135	501
13:00 - 14:00	126	138	119	140	523
14:00 - 15:00	146	137	132	127	542
15:00 - 16:00	150	159	130	158	597
16:00 - 17:00	148	164	170	185	667
17:00 - 18:00	167	180	176	156	679
18:00 - 19:00	175	134	154	118	581
19:00 - 20:00	127	123	125	119	494
20:00 - 21:00	85	102	102	92	381
21:00 - 22:00	70	80	66	59	275
22:00 - 23:00	66	59	65	49	239
23:00 - 24:00	37	29	32	23	121
TOTAL					8447

ata Info
7/31/2026
8/1/2026
12:00 AM
12:00 AM
tonygrange
Accepted

Location Info	
Location ID	00239_SB
Type	I-SECTION
Functional Class	4
Located On	SH 33 MAIN
	SH-33 0.4 Mi. S of Darby Rd
Direction	SB
Community	-
MPO_ID	
HPMS ID	
Agency	Idaho Transportation Department

Count Da	
Start Date	
End Date	
Start Time	
End Time	
Direction	
Notes	
Count Source	
File Name	
Weather	
Study	
Owner	
QC Status	

Interval: 15 mins					
Time	15 min				Hourly
	1st	2nd	3rd	4th	Count
00:00 - 01:00	7	10	3	1	21
01:00 - 02:00	2	3	1	2	8
02:00 - 03:00	1	2	2	0	5
03:00 - 04:00	3	1	3	6	13
04:00 - 05:00	8	12	11	10	41
05:00 - 06:00	17	33	46	55	151
06:00 - 07:00	71	80	101	104	356
07:00 - 08:00	124	135	145	143	547
08:00 - 09:00	127	137	134	140	538
09:00 - 10:00	122	121	131	170	544
10:00 - 11:00	127	185	146	163	621
11:00 - 12:00	194	172	172	147	685
12:00 - 13:00	151	128	166	153	598
13:00 - 14:00	154	138	148	155	595
14:00 - 15:00	146	131	136	125	538
15:00 - 16:00	131	113	133	129	506
16:00 - 17:00	155	140	113	133	541
17:00 - 18:00	147	115	142	133	537
18:00 - 19:00	122	109	111	92	434
19:00 - 20:00	101	85	81	79	346
20:00 - 21:00	52	70	55	63	240
21:00 - 22:00	109	78	122	111	420
22:00 - 23:00	100	68	84	52	304
23:00 - 24:00	27	33	18	42	120
TOTAL					8709

ata Info
7/10/2026
7/11/2026
12:00 AM
12:00 AM
tonygrange
Accepted

Location Info	
Location ID	00239_SB
Type	I-SECTION
Functional Class	4
Located On	SH 33 MAIN
	SH-33 0.4 Mi. S of Darby Rd
Direction	SB
Community	-
MPO_ID	
HPMS ID	
Agency	Idaho Transportation Department

Count Da	
Start Date	
End Date	
Start Time	
End Time	
Direction	
Notes	
Count Source	
File Name	
Weather	
Study	
Owner	
QC Status	

Interval: 15 mins					
Time	15 min				Hourly Count
	1st	2nd	3rd	4th	
00:00 - 01:00	5	5	3	12	25
01:00 - 02:00	5	2	0	3	10
02:00 - 03:00	6	1	1	3	11
03:00 - 04:00	1	1	4	3	9
04:00 - 05:00	5	5	21	16	47
05:00 - 06:00	16	28	49	50	143
06:00 - 07:00	72	79	99	108	358
07:00 - 08:00	99	143	133	140	515
08:00 - 09:00	143	148	136	124	551
09:00 - 10:00	131	113	150	150	544
10:00 - 11:00	153	132	167	175	627
11:00 - 12:00	164	150	165	161	640
12:00 - 13:00	134	136	124	173	567
13:00 - 14:00	158	154	124	156	592
14:00 - 15:00	168	154	133	133	588
15:00 - 16:00	120	128	140	143	531
16:00 - 17:00	148	145	126	131	550
17:00 - 18:00	147	121	111	125	504
18:00 - 19:00	116	91	100	96	403
19:00 - 20:00	88	94	97	71	350
20:00 - 21:00	62	76	68	60	266
21:00 - 22:00	86	72	68	75	301
22:00 - 23:00	68	75	37	25	205
23:00 - 24:00	24	13	17	10	64
TOTAL					8401

ata Info
7/17/2026
7/18/2026
12:00 AM
12:00 AM
tonygrange
Accepted

Location Info	
Location ID	00239_SB
Type	I-SECTION
Functional Class	4
Located On	SH 33 MAIN
	SH-33 0.4 Mi. S of Darby Rd
Direction	SB
Community	-
MPO_ID	
HPMS ID	
Agency	Idaho Transportation Department

Count Da	
Start Date	
End Date	
Start Time	
End Time	
Direction	
Notes	
Count Source	
File Name	
Weather	
Study	
Owner	
QC Status	

Interval: 15 mins					
Time	15 min				Hourly Count
	1st	2nd	3rd	4th	
00:00 - 01:00	14	6	9	3	32
01:00 - 02:00	3	2	1	3	9
02:00 - 03:00	4	4	2	3	13
03:00 - 04:00	0	1	2	11	14
04:00 - 05:00	10	10	19	17	56
05:00 - 06:00	24	29	37	57	147
06:00 - 07:00	62	89	109	107	367
07:00 - 08:00	108	138	133	151	530
08:00 - 09:00	133	127	139	128	527
09:00 - 10:00	126	167	172	160	625
10:00 - 11:00	143	165	142	155	605
11:00 - 12:00	165	160	158	147	630
12:00 - 13:00	158	163	120	139	580
13:00 - 14:00	160	140	140	127	567
14:00 - 15:00	132	133	131	150	546
15:00 - 16:00	149	146	135	129	559
16:00 - 17:00	145	151	149	145	590
17:00 - 18:00	155	153	137	149	594
18:00 - 19:00	146	125	117	94	482
19:00 - 20:00	108	108	96	78	390
20:00 - 21:00	78	71	69	76	294
21:00 - 22:00	77	64	66	74	281
22:00 - 23:00	81	78	58	38	255
23:00 - 24:00	22	22	16	19	79
TOTAL					8772

ata Info
7/24/2026
7/25/2026
12:00 AM
12:00 AM
tonygrange
Accepted

Location Info	
Location ID	00239_SB
Type	I-SECTION
Functional Class	4
Located On	SH 33 MAIN
	SH-33 0.4 Mi. S of Darby Rd
Direction	SB
Community	-
MPO_ID	
HPMS ID	
Agency	Idaho Transportation Department

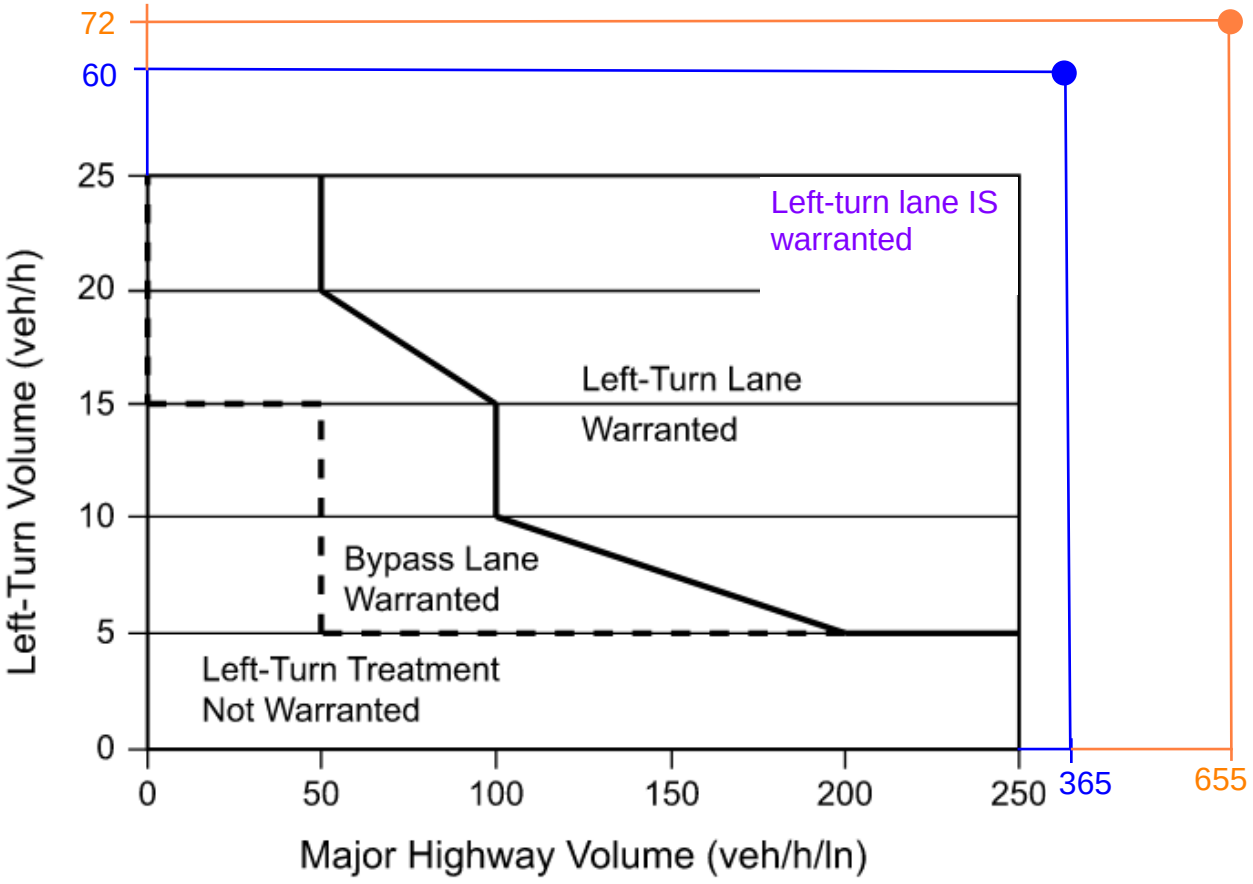
Count Da	
Start Date	
End Date	
Start Time	
End Time	
Direction	
Notes	
Count Source	
File Name	
Weather	
Study	
Owner	
QC Status	

Interval: 15 mins					
Time	15 min				Hourly
	1st	2nd	3rd	4th	Count
00:00 - 01:00	10	3	4	2	19
01:00 - 02:00	2	2	4	3	11
02:00 - 03:00	1	1	2	4	8
03:00 - 04:00	1	2	1	7	11
04:00 - 05:00	5	13	18	22	58
05:00 - 06:00	28	26	41	62	157
06:00 - 07:00	84	81	86	98	349
07:00 - 08:00	111	133	137	126	507
08:00 - 09:00	121	135	131	125	512
09:00 - 10:00	129	127	176	157	589
10:00 - 11:00	150	148	148	168	614
11:00 - 12:00	147	147	154	164	612
12:00 - 13:00	148	131	147	164	590
13:00 - 14:00	120	143	135	121	519
14:00 - 15:00	120	127	129	137	513
15:00 - 16:00	141	114	127	143	525
16:00 - 17:00	120	125	109	135	489
17:00 - 18:00	148	129	129	126	532
18:00 - 19:00	129	142	119	94	484
19:00 - 20:00	103	96	110	70	379
20:00 - 21:00	82	69	81	78	310
21:00 - 22:00	65	60	66	76	267
22:00 - 23:00	76	64	80	25	245
23:00 - 24:00	16	15	15	18	64
TOTAL					8364

ata Info
7/31/2026
8/1/2026
12:00 AM
12:00 AM
tonygrange
Accepted

Appendix C Turn Lane Warrant Sheets

SH-33 / Site Access A - SBL
Year 2027 Total Traffic Conditions - Full Movement
Peak Hour of Adjacent Street Traffic With Development Trips
Peak Hour of the Generator



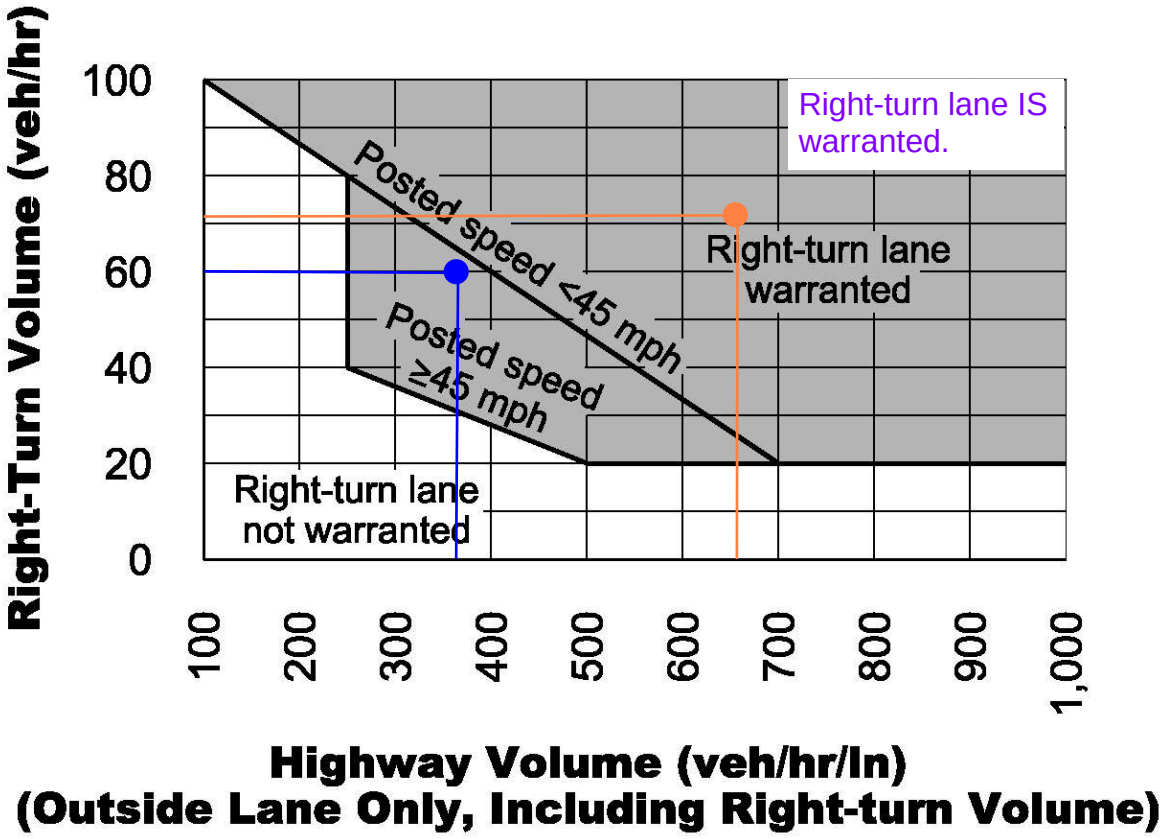
(a) Three-Leg Intersections

Table 9-25. Suggested Left-Turn Treatment Guidelines Based on Results from Benefit–Cost Evaluations for Intersections on Two-Lane Highways in Rural Areas (*16*)

Left-Turn Lane Peak-Hour Volume (veh/h)	Three-Leg Intersection, Major-Road Two-Lane Highway Peak-Hour Volume (veh/h/ln) that Warrants a Bypass Lane	Three-Leg Intersection, Major-Road Two-Lane Highway Peak-Hour Volume (veh/h/ln) that Warrants a Left-Turn Lane	Four-Leg Intersection, Major-Road Two-Lane Highway Peak-Hour Volume (veh/h/ln) that Warrants a Left-Turn Lane
5	50	200	150
10	50	100	50
15	< 50	100	50
20	< 50	50	< 50
25	< 50	50	< 50
30	< 50	50	< 50
35	< 50	50	< 50
40	< 50	50	< 50
45	< 50	50	< 50
50 or More	< 50	50	< 50

Note: These guidelines apply where the major road is uncontrolled and the minor-road approaches are stop- or yield-controlled. Both the left-turn peak-hour volume and the major-rad volume warrants should be met as shown in Figure 9-36.

Figure 3B-1. Right-Turn Lane Warrant



Appendix D Queuing Worksheet

Scenario: Full Buildout
Total vehicles in Peak Hour 144
Percent of Vehicles Arriving in 60 min 1

Vehicles Arriving 144
Time Period for Arrivals = 60 min peak

Avg Service Time = 30 sec

Theater Arrivals

Enter Trip Gen

	In	Out
	144	144

Confidence Factor (2 would indicate approx 95% for a particular interval)

Max Cars1

Capacity

Excess

Potential

Interval

Served During

Current Interval Cars Served

Waiting to Be

Used

Queue Space Prior attendant Space to Attendant 400

Assuming 100% of Attendant Spaces = 1 Explain: Assume 100% of the available spaces will be used at the same time based on demand.

Max Arrivals Served

Calculation			Time	Percent Arrivals	15-min	Percent Departures	15-min	Staff/Other Est	Arrivals Vehicle	Arriving at Confidence Factor							
									7	7	10	7	0	3	0	26	0
Avg Spaces needed =	1.2		6:35-6:40	5%		5%		7	7	0	7	7	10	7	0	3	0	26	0
Peak Spaces needed =	2.4	Approx 95th Percentile	6:40-6:45	5%	15%	5%	15%	7	7	0	7	7	10	7	0	3	0	26	0
Rounded	2	spaces	6:45-6:50	5%		5%	20%	7	7	0	7	7	10	7	0	3	0	26	0
Appriximate Dist	40	feet	6:50-6:55	5%		5%		7	7	0	7	7	10	7	0	3	0	26	0
			6:55-7:00	10%	20%	10%		14	14	0	14	14	10	10	4	0	4	26	0
Queue Calculation - Peak Arrivals			7:00-7:05	15%		15%		22	22	0	22	22	10	10	12	0	16	26	0
			7:05-7:10	10%		10%		14	14	0	14	14	10	10	4	0	20	26	0
Arrival Rate	25.0	sec/veh	7:10-7:15	10%	35%	10%	35%	14	14	0	14	14	10	10	4	0	25	26	0
Service Rate	15.00	sec/veh	7:15-7:20	10%		10%		14	14	0	14	14	10	10	4	0	29	26	0
Utilization Rate	0.6		7:20-7:25	10%		10%		14	14	0	14	14	10	10	4	0	34	26	0
Average Queue	1.5		7:25:7:30	10%	30%	10%	30%	14	14	0	14	14	10	10	4	0	38	26	0
Peak Queue	3			100%		100%		144	144		144	144							

Avg Max Stored in Queues or On-Site Waiting **38** **0**