

MEMORANDUM



Date: September 24, 2015

To: Ryan Howes – Burls Creek/Republic Live
From: Kenneth Wersted
CC: MTO, OPP, Oro-Medonte, Simcoe County

Re: 2015 Boots and Hearts Traffic Recap; CM Project No. 114-099

ENGINEERS
PLANNERS
SURVEYORS

This memo summarizes the traffic observations around the 2015 Boots and Hearts event and offers recommendations for improvements for future events.

1. Summary

Overall, transportation during the 4th year of this event went well according to the feedback received from the local officials and law enforcement. Gates were opened around 10:30 Wednesday morning (8/5) and traffic was slow to arrive to the area. All northbound traffic was directed to Line 7, southbound to Line 9, and VIP/RV's to Line 5. There was no significant congestion related issues on Hwy 11 through the entire weekend. The only significant off-site queuing came on Wednesday afternoon when RV's began arriving. Traffic queued from the Gate 8B tollbooths to Ridge Road (2 km). Extra parking crews from Gate 9A were redeployed to assist the RV parking and OPP closed Line 8 SB to implement two northbound lanes. This prevented any queuing on Ridge Road. As traffic loaded into the site, the queue dissipated in a few hours and Line 8 SB was reopened. All gates remained open through Wednesday night at a reduced capacity. By Thursday morning the west side of the site was an estimated 70% full, so arrival messaging was updated to direct all traffic to Line 9 where the east campground was only 25% full. Thursday also brought the beginning of a neighbor sponsored off-site parking operation. Off-site parking began at the Elite Computer store on Hwy 11 and extended to several business and private residence properties on Line 7 and Line 9. This generated pedestrian traffic on these roads that wasn't previously seen with WayHome. Event staff was prepared for another peak in traffic Thursday evening as experienced at WayHome but no significant increase in traffic was observed. Drop offs increased through the afternoon and evening with all the activity taking place on-site. Similarly, traffic on Friday afternoon was minimal and no impacts to the highway were observed or reported.

It became clear through the tracking of the arriving number of vehicles and the wristbands that entered, that the number of people entering the event was increasing at a higher rate than the number of vehicles, suggesting that the difference were people that were dropped off, walked in, or used the shuttle. The hotel and off-site shuttles numbers were minimal, so the number of people seeking a pick up at the end of the show was a concern. As such, the event team and OPP discussed what would be anticipated for the exit and planned accordingly.

The major egress began around 10 PM on Sunday night. Arriving pick up traffic was directed into Gate 7C to use the gravel pad and the pre-existing drop off area for picks ups. Gate 7C and 7A were used for the camping egress. The Trinity Church was set up as a staging area for arriving traffic to wait for when space became available on-site or their party had arrived for their pick up. Line 7 had significant congestion in due in part to the limited traffic flow northbound on Line 7 resulting from people walking back to the off-site parking. This congestion lasted a couple of hours and eased around 2 AM. A drive through indicated about 50% of campers left Sunday night, which meant Monday would have a significant egress. The Monday morning egress really picked up around 9 AM. Some slowing traffic on

MEMORANDUM

2015 Boots and Hearts Traffic Recap
September 24, 2015

Hwy 11 SB at Esso/Tim Hortons was evident before that which may have been typical commuter traffic, but increased by mid to late morning due to event traffic. Traffic on the west side of the site, including the RV camping along the highway all were exiting to Line 7. Patrons opened two sections of fencing and exited through Gate 7AA. Traffic using three exit points to Line 7 was all limited to the capacity of one lane on Line 7. Some RV's along the highway ignored security and began exiting to Line 8 through Gate 8B. Patrons in VIP had the longest wait, including several hours. This traffic was lead out the highway campground to Gate 8B to increase the egress capacity. The site was largely empty by noon on Monday.

2. Recommendations

The following recommendations are in addition to those discussed as part of WayHome, and are provided for consideration at future events:

1. **Review and consider a new RV entrance plan during the peak arrival** – With the volume of RV's that are generated by B&H, consider routing these vehicles through the Line 9 entrance. Line 9 had additional capacity to accommodate more traffic during the Wednesday arrival. GA camping and RV's could be separated internally with RV's being directed to their final camping areas.
2. **Improve drop off/pick up areas** – The drop off and pick up areas should be formalized. Each area evolved during the events to optimize the operations. The Line 7 drop off area was bigger than necessary for WayHome, and just right for B&H, but could have been larger for the pick up. Line 9 was about the right size, but far from the tollbooths and its entrance/exit was modified during the event.
3. **Accommodate shuttles and/or taxis on Line 8** – Some staff (namely security) arrived via shuttle and were dropped off on Line 8. Likewise, some staff used taxi services to arrive to Line 8. These services were forced to use the shoulder of Line 8 for pick ups and drop offs. Providing an area for them to stage would improve operations and reduce conflicts.
4. **Facilitate a day parking sales option** – Day parking was largely underutilized for both events. Because day-parking sales were closed, those that left the campground either had to use the off-site shuttle or park at one of the neighboring properties. Allowing day-of sales may have resulted in a higher utilization of the parking area.
5. **Allow, but meter, traffic exiting to Gate 8B** – Traffic exiting the campground along the highway was directed to Line 7, as it was for WayHome. However, this routing significantly increased the delays exiting the site and resulted in drivers disobeying security on Monday morning. Allowing traffic to exit this campground through Gate 8B in a metered fashion would expedite the egress without significantly affecting the conflicts between traffic flows at the Line 9 S/overpass intersection.
6. **Allow, but meter, traffic exiting south to Ridge Road** – As experienced with Boots and Hearts, the egress Monday morning left some patrons waiting hours to exit, a sharp contrast to the minimal delays they experienced entering. In peak conditions, allow traffic, specifically passenger vehicles, to be directed southbound on Line 7 to Ridge Road, then west to Line 5 and back to Hwy 11. This will expedite the exit without significantly impacting access to Ridge Road by the lake shore community.

3. Traffic data

The following observations were recorded based on the data collection program implemented during the arrival period (Wednesday through Friday) and over the course of the event:

MEMORANDUM

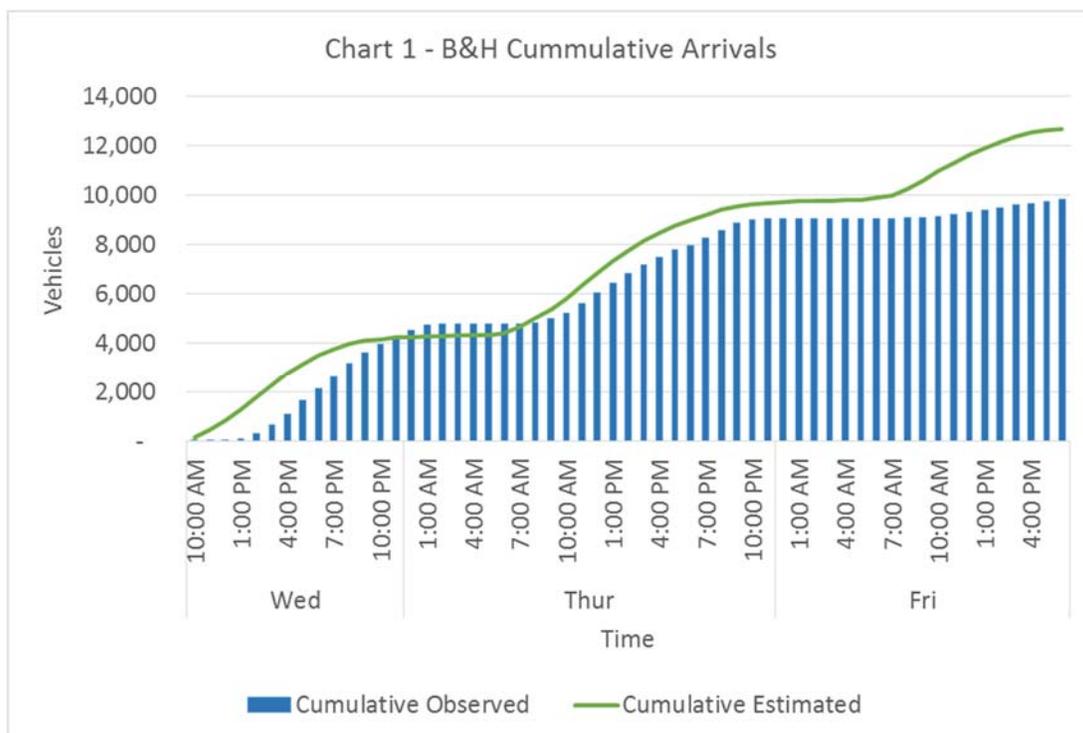
2015 Boots and Hearts Traffic Recap

September 24, 2015

- **Vehicle Occupancy** - There was an average of 2.4 people per car and 3.7 per RV based on field observations.
- **Arrival Distribution** - Chart 1 shows that the accumulated count of vehicles (GA, VIP, and RV's) arriving to the event by 1 a.m. Thursday totaled about 4,750 cars (48%), 9,050 vehicles (92%) by midnight Friday, and 9,800 (100%) by 6 PM Friday. The total number of parked cars at the event is estimated to be about 23% less than assumed in the TMP.

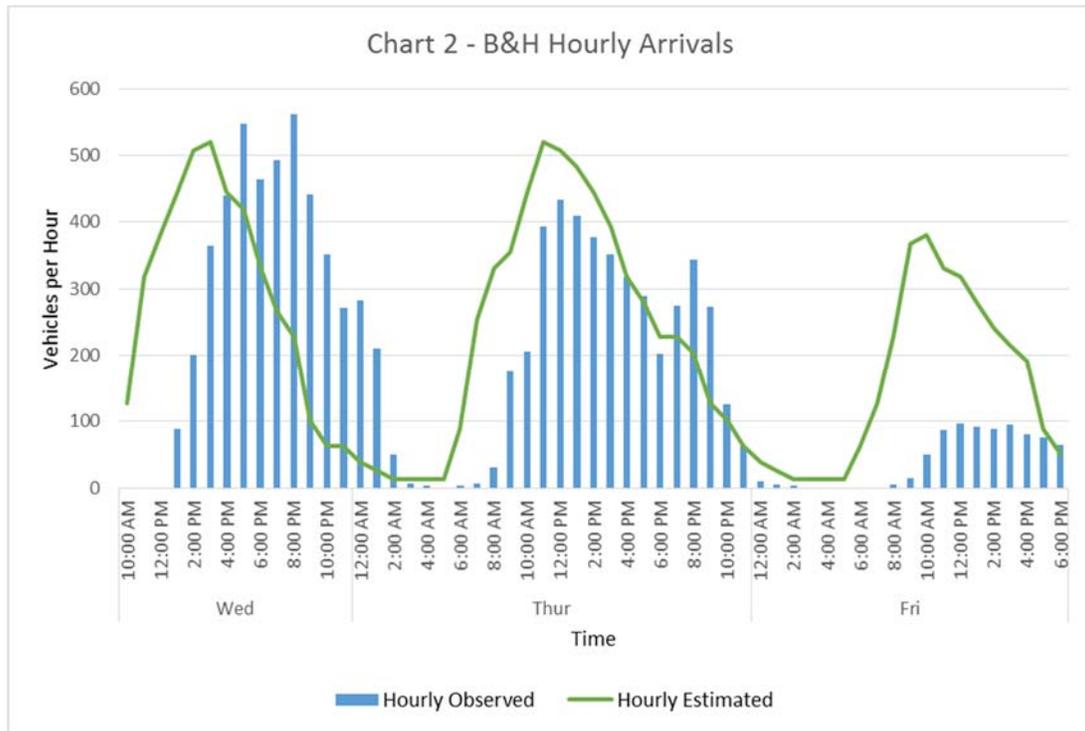
Chart 2 illustrates the hourly traffic volumes processed through the gates. The chart shows that the arrivals on Wednesday had a similar peak magnitude as was estimated, but arrived about 4 hours later than expected. Traffic peaked on Thursday at about the same period as expected but was about 15% less than expected, and included an evening peak. On Friday, traffic was light, steady, and substantially lower than expected.

- **Delays** – Arrival delays on Wednesday average around 30 minutes, but peaked at 50 minutes during the afternoon peak in RV's. On Thursday, delays averaged about 20 minutes or less, and were minimal on Friday and through the remainder of the weekend. On the exit, delays were estimated to range from 10 minutes to 4 hours. Campers that arrived early were parked closest to the venue and had to wait the longest to exit, while campers that arrived to the venue late were parked closest to the exit and were able to leave with the shortest delay. All vehicles that were parked in the highway campground north of the venue (Campground C) were directed to exit through the west campground to Gate 7A/B through Sunday night, until they were allowed to exit 8B Monday mid-morning. Allowing this movement to exit Gate 8B to Hwy 11 decreased the potential exit delays.



MEMORANDUM

2015 Boots and Hearts Traffic Recap
September 24, 2015



4. Timeline

Tuesday

- Coordinated with Battlefield Equipment Rental on the deployment of the PCMS. Begin static sign installation.

Wednesday (GA/VIP Camping Opens)

- AM: Complete static sign installation.
- 10:30 AM: Gates open to GA and RV's. Traffic flowing freely on Hwy 11. PCMS directing NB traffic to Line 7, SB to Line 9, RVs/VIP to Line 5.
- 2:00 PM: Significant increase in RVs arriving. Additional parking staff deployed to RV area. RV queue builds and extends south on Line 8 from Gate 8B.
- 3:30 PM: RV queue approaching Ridge Road, OPP implements Line 8 SB closure, and stacks two northbound lanes with RV's. PCMS 4 and 5 note Line 8 SB closure. Line 8 S decel lane closed and arrow truck deployed.
- 6:30 PM: RV queue dissipates and Line 8 S reopened.

Thursday

- AM: Drove through campgrounds; Line 7 is estimated at 75% full, Line 9 25%. PCMS messaging changed to direct all new arrivals to Line 9.
- Noon: Compliant to OPP about event sign on neighbor's lawn (opposite Gate 7B, and in ROW). Sign relocated to the Burls Creek side of the road.
- 3 PM: Traffic is flowing smoothly on all roads.
- 8 PM: Pedestrians walking south on Hwy 11 observed. They appeared to originate from the Computer Elite business.

MEMORANDUM

2015 Boots and Hearts Traffic Recap

September 24, 2015

Friday

- AM: Confirmed with MTO that pedestrians are allowed to walk along Hwy 11. MTO confirmed that no encroachment permit was obtained so the "Parking" sign at the Computer Elite was removed by the owner.
- PM: Traffic is flowing smoothly; no cottage traffic related congestion and no impacts due to the event were observed.
- Vehicles entering have tapered off but wristband scans continue to increase indicating increasing number of walk in's, shuttles, or drop offs.
- 10:30 PM: 725 cars parked in day parking. About 30 people observed walking up Line 9 to parking sold by neighbors.

Saturday

- Day: Arriving traffic flow (camping) is low; about 30 cars arrived overnight with another 50 cars over 12 hours. With the low arrival volumes, all camping traffic is directed to Line 7 and day parking is directed to Line 9. Traffic is flowing smoothly on all roads. Drivers that left and were denied reentry are directed to Orillia Walmart for a shuttle, but shuttle use is low (about 15 passengers on Saturday). Alternatively, drivers may be parking at neighbor's property and walking in. PCMS 7 had an LED module with a loose connector which was fixed. OPP reported people on Hwy 11 overnight, presumably getting out of the campground through the fence. BC walked the fence line but found no holes.
- 10:30 PM: 740 vehicles parked in day parking.

Sunday

- Day: No traffic issues on Sunday. Some congestion on Hwy 11 SB west of Line 3 (around "Gasoline Alley") and through Barrie which is likely attributed to returning cottage traffic and the Hwy 400 merge. Gates 7 B/C and 9A is prepared for the egress. Parking at the fish business at Line 7 S/overpass is fully parked, as is the shoulder area around the intersection.
- 9 PM: BC staff in position for egress, waiting for OPP to take positions. Traffic was flowing freely on Hwy 11. Some traffic is exiting but it's relatively low.
- 10:00 PM: Exiting traffic is steady and increasing. Traffic arriving to the event for pickups is increasing. All traffic is exiting out Gate 7C; pickups are entering Gate 7C and circulating around the gravel pad and the grassed area, then exiting 7A. Security (Star) is notified to allow traffic to exit the campground via Gate 7A. OPP staffs Gate 7C and the church entrance. PCMS messages updated for egress conditions.
- 11 PM: Traffic moving northbound on Line 7 is slow due to the number of pedestrians walking backed to parked cars in the neighborhood. Traffic moving southbound to Gate 7C is slow due to cross over maneuver between entering and exiting traffic. Pedestrian egress slows and vehicles continue to exit steadily. Traffic on Hwy 11 is flowing smoothly.

Monday

- Midnight: The egress pattern is changed to allow the main campground to exit through Gate 7B and pickups to enter Gate 7C.
- 1:30 AM: The Sunday night egress peak is over. A drive through the campgrounds suggested 50% of campers left Sunday night. All PCMS were "blanked."
- 8:30 AM: Hwy 11 flowing smoothly.
- 9 AM: RV drivers ignore security and begin exiting Gate 8B. OPP consulted and the operation is allowed to continue. Traffic steadily exiting Gates 9A but egress flow rate is reduced due to

MEMORANDUM

2015 Boots and Hearts Traffic Recap

September 24, 2015

drivers stopping at Line 9 exit. 2 km queue forms internally. Event staff begin directing traffic at Gate 9A and exit flow is increased. Queue is dissipated in approximately 20 minutes. Attendees open fence lines and begin exiting Gate 7AA. Three exit flows now merge onto Line 7 as one lane. Queues on Line 7 NB at the overpass develop and extend into the site. PCMS messages for exit activated.

- 11 AM: The VIP campground drivers complain of long delays (they are at the end of the line). Drivers are lead north on Eagle Avenue to exit via Gate 8B. Congestion on Hwy 11 SB develops and lasts approximately 1 hour. Line 9 camping egress is complete.
- Noon: Slow moving traffic on Line 7 S NB as last bit of camping continues to exit. Hwy 11 SB is clear, but some congestion remains around the Esso Station.