Special Event Traffic Management: Lessons Learned from the Inaugural Pemberton Music Festival

ITE Quad Conference

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Presentation Overview

• Provide a case study of traffic management planning for a major special event.
• Review forecast and actual traffic implementation challenges.
• Discuss planning considerations for future festivals.
• Discuss planning considerations for practitioners in general.
Introduction

• Three-day, multi-artist music festival.
• European style (camping on site, parking restricted)
• 40,000 tickets sold.
• Live Nation, largest promoter / producer of live music in the world.
• Thursday, July 24th to Monday, July 28th 2008.
• Eight month planning and delivery period (December 2007 to July 2008).
Work Tasks and Key Issues

• Complete a Traffic Impact Study (TIS)
• Develop Traffic Management Plan (TMP) for approval
• Attend Regularly Scheduled:
  ▪ Stakeholder meetings (External)
  ▪ Site planning meetings (Internal)
• Implement TMP and monitor and adapt plan as required
• Develop recommendations for future festivals
• Key Issues:
  ▪ First time event, no precedent in area
  ▪ Sensitivity of corridor during S2S construction
  ▪ Limited alternative routes
  ▪ Multiple stakeholders
Study Corridor
Traffic Impact Study

- Forecast peak volumes
- Forecast peak times
- Foundation for TMP development
- Lots of capacity available on Highway 99 near site
- 90% south / 10% north distribution
- Personal vehicles and shuttle profiles were developed for each hour, peak of 1,500+ vehicles per hour inbound
- Approximately 250 staff related trips
Traffic Management Strategies

- A pre-screening checkpoint to be located in Whistler.
- Majority of festival parking planned west of the site off of Pemberton Farm Road and Airport Road.
- Internal shuttle priority may be required.
- Pathways to east / west parking areas
- Heaviest congestion predicted for Whistler (due to pre-processing).
- Carpooling incentives, local / regional shuttle services and spreading of arrivals and departures.
Traffic Control Plan - Whistler

- Festival check-ins at Whistler Creekside and Blackcomb Day Lodge.
- Whistler shuttle service to / from site.
- TCP’s at Garage and on Highway to direct and control traffic.
- Initial target processing rate of 1,152 vph (process 24 vph / staff and have 48 staff / service positions).
- Both processing capacity and demand were cut back significantly with opening of downtown Vancouver check-ins (focus on carpools, VIP, motorcycle accreditation).
• Numerous iterations as concert plan came together.
• Intent was to minimize traffic in front of site.
• Pathways connecting adjacent parking areas to site.
Traffic Control Plan – Local Overview

- Temporary speed reduction on Highway near the site.
- TCP’s to direct & control traffic.
- Colour coded signs and tags for parking.

Notes:
1. “No Stopping” signs to be placed in strategic locations along Highway 99, Airport Road, Pemberton Farm Road and Clover Road.
2. TCP scheduling details on following pages.
Traffic Control Plan – Intersection Flagging

Drawing is not to scale

To downtown, Whistler, Vancouver

Normal operation

Exit priority

Entrance priority

Highway 99

Lillooet River Bridge

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Shuttle priority plan on standby
Public Information Plan

- Stakeholders included:
  - Ministry of Transportation (multiple Districts)
  - Sea to Sky Concessionaire
  - Resort Municipality of Whistler
  - Village of Pemberton
  - RCMP
  - BC Ambulance
  - Fire / Rescue Authorities

- Static Advisory Signs / CMS
- Newspaper, radio and internet
- Safety information posted on the website and at check-in
Signage and Wrecker Locations Throughout Study Corridor
Implementation Plan

- Set out roles / responsibilities and reporting hierarchy
Implementation Challenges By Day

- **Thursday:**
  - Inbound processing times (security screening and transfer to shuttles)
  - Early / Late arrivals
  - Hours of service for shuttle drivers / volunteers
  - Communications (incl. rumour management)
- **Friday:**
  - Stopping on highway
  - Sorting car pools / general traffic
- **Saturday / Sunday:**
  - Day trips between Whistler and Pemberton
  - In / Out trips
- **Monday:**
  - Heavy congestion through Squamish (narrowly avoided rocksldie)
Implementation Challenges Continued

CUMULATIVE DEMAND PROFILE - Saturday, July 26th, 2008
Pemberton Northbound
(between Lorimer Road and Downtown Pemberton)

Peak Queue = 1,800 vehicles (12 km)
Peak Delay = 3.5 hours
Responses

• Thursday:
  ▪ Shuttle Priority activated
  ▪ Creekside processing management
  ▪ Interventions at Airport to clear backlog
  ▪ “Texting” updates to overcome communications logjam

• Friday:
  ▪ Whistler northbound traffic monitoring
  ▪ Ensure checkpoints decommissioned
  ▪ Revised PCMS signage and static sign locations

• Saturday / Sunday:
  ▪ Shuttle coordination and patron wayfinding assistance
  ▪ Airport parking and circulation management
  ▪ Incident management
  ▪ Artist escort priority
  ▪ Removal of night-time construction closure

• Monday:
  ▪ Monitor lot clear outs
Close Out Report

• Documented implementation of the TMP and any field changes made.
• Needed an “objective” document to present a picture of what went well and what did not.
• Basis for future festival planning.
• 33% and 120% greater daily volume than previous year’s counts on south and north corridor segments, respectively.
• 3.0 persons per vehicle at Creekside checkpoint.
Festival Findings and Recommendations

- Additional TDM measures such as shuttle packages and enhanced Park ‘n Ride (Rocky Mountaineer?).
- Distribute a more comprehensive festival package in advance of the festival.
- Limit “in and out” trips from site during festival.
- Access / egress must be defined earlier in the process.
- Coach-style shuttle buses and/or introduce baggage limits.
- Focused Pedestrian Management Plan.
- Extend TCP staff shift times (early arrivals).
- Additional mobile signage and more CMS (versus static) guide signage.
- Form a “Circulation Planning Team” as a subset of event planning.
General Findings and Recommendations

- Processing times will govern performance.
- Staffing and mobilization the major cost consideration.
- Be prepared for hands on, active traffic management.
- Need to be in the field to “make the call”.
- No such thing as too many face-to-face meetings.
- Delegation of responsibilities as event “ramps up”.
- Use “bottom-up” intelligence to your advantage.
- Remember the 80/20 principle.
- Congestion may be unavoidable – focus on safety.