



Date:	March 9, 2018
To:	Casey Knecht, PE ODOT Region 2 Julia Uravich, PE, Marion County
From:	Joe Bessman, PE & Del Huntington, PLS
Project Reference No.:	1117
Project Name:	Willamette Country Music Festival Contingency Routes

The purpose of this memorandum is to provide a range of contingency routing options for discussion at our March 9, 2018 meeting in response to ODOT comments about the suitability or capacity of the primary event route to accommodate traffic demands.

ADDITIONAL REPORT ITEMS

The following items will be addressed within a TIA amendment that will be submitted under separate cover.

- Correction noted for Table 5 in the TIA regarding the Safety Priority Index System and will be identified in an amendment to the TIA.
- Correction noted for Table 5 in the TIA regarding the shoulder widths transposed on some approaches. This correction will be identified in an amendment to the TIA.
- As requested, we will provide traffic volume diagrams displaying turn movement volumes at all study intersections in the amendment to the TIA.

ANALYSIS PERIODS

As discussed within the TIA, to support the event attendees two separate routes are required for event ingress, which is the critical time period that could result in queuing on the I-5 corridor. The Thursday event start date was selected as the most critical time period for this analysis as it:

- includes higher commuter traffic volumes along the I-5 corridor as compared to Saturday,
- the recreational vehicles arrive at the Festival throughout the day on Thursday,
- anticipated delays with general admission parking on the first day of the event as attendees are unsure of where to go, and
- potential for on-site check-in/registration delays.

It should be noted that the 2019 event will include 2,400 fewer camping sites than Brownsville to allow the team to refine the Thursday ingress control strategies at this site within its initial year.

ORIGINAL ROUTING PLAN

The original detour routes presented by Willamette Country Music Festival to ODOT provided additional queue distance by routing I-5 southbound motorists around the Ankeny Wildlife Refuge, and to enter the site along Wintel Road, while I-5 northbound motorists were diverted along Talbot Road, to Marlatt Road, to Wintel Road. In addition to concerns from the public about wildlife impacts, from a transportation perspective the original route merged traffic from I-5 southbound with traffic from I-5 northbound at the Marlatt Road/Wintel Road intersection. The merging of these two traffic flows exceeded the carrying capacity of the T-intersection at Wintel Road. Despite the extended queue storage provided, this strategy would necessarily result in extensive queues that would have additional impacts on area farms and residences (and potentially I-5). Because of this we do not believe the original routes recommended in ODOT's comments provide a viable traffic control strategy.

ROUTE ADEQUACY

The adequacy of the primary route shown in the TIA is premised on the ability of the check-in access points and gates to accommodate demands as quickly as they arrive from the County roads (and for the majority of event patrons the I-5 corridor). This will require modifications to traffic control to allow free-flowing maneuvers along the proposed routes. With this proposed traffic plan, the only point of delay will be experienced in the case of a vehicle breakdown/incident, or as vehicles exit the County road system into the event area. While ODOT has requested a simulation-based queue analysis of these routes, the analysis would identify uninterrupted flow conditions with the traffic control changes as requested in the TIA.

As the event is still 18 months out, the team has not fully resolved the internal site layout. We understand that the event will need to separate pedestrians from primary ingress/egress routes to avoid backups and delays along these routes. In addition, while the traffic control strategies presented indicate the routes that will ultimately be prioritized for free-flowing maneuvers, additional details on how to avoid conflicts with this route will need to be further defined within a more refined Temporary Traffic Control Plan. While the numbers of patrons arriving from other roads (Winter Creek Road, Talbot Road, Liberty Road, etc.) are estimated to be low, it is acknowledged that attendees with GPS systems may alter their route to the event. We recognize the need to anticipate how travel patterns and driver information will change during each day of the event.

As identified within the TIA, we feel that the original route with adequate entry points and resolution of vehicle/pedestrian conflicts provides the necessary capacity to support the anticipated demands for a completely sold-out festival with 30,000 persons. In recognition of the possibility of an incident or blockage of the roadway, the following 6 figures illustrate potential contingency routes for southbound and northbound attendees along the I-5 corridor. Advantages and disadvantages of each of these routes in terms of ease of implementation, length, and feasibility are included.

I-5 SOUTHBOUND CONTINGENCY INGRESS ROUTE OPTIONS

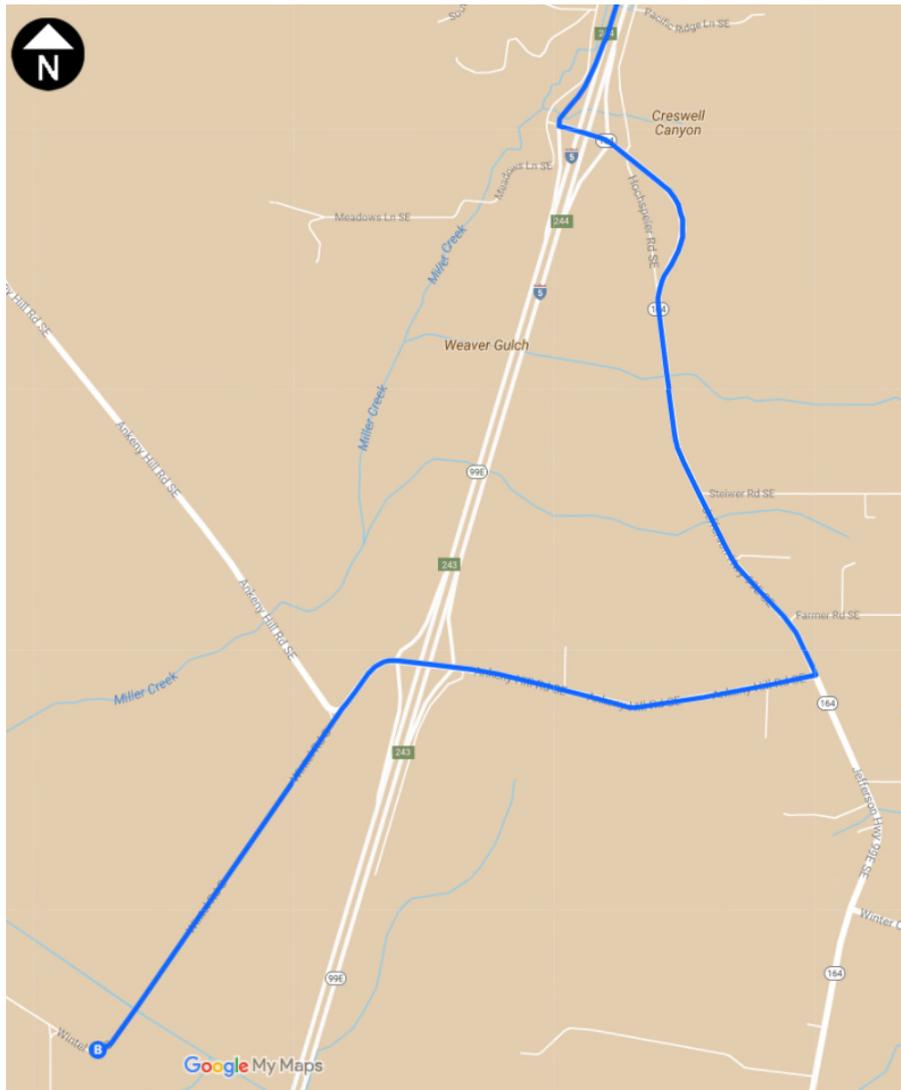


Figure 1. I-5 Southbound Contingency Route Option #1

Benefits:

- Adds 2.25 miles of queue storage space for the I-5 Southbound Traffic (approx. 475 vehicles)
- Utilizes Jefferson Highway (OR 99E) which has wider shoulders than County roads and a wide turning radius onto Ankeny Hill Road
- Low impact to adjacent land uses along the Jefferson Highway

Disadvantages:

- Higher volume of traffic on the Jefferson Highway than on County Roads
- Exit from North Jefferson interchange requires a left-turn maneuver (low conflicts)
- Would require closure of Ankeny Hill interchange to event traffic
- Requires a more difficult and pre-placed traffic control plan to switch from the primary route
- Time required to update variable message signs on I-5 north of North Jefferson Highway

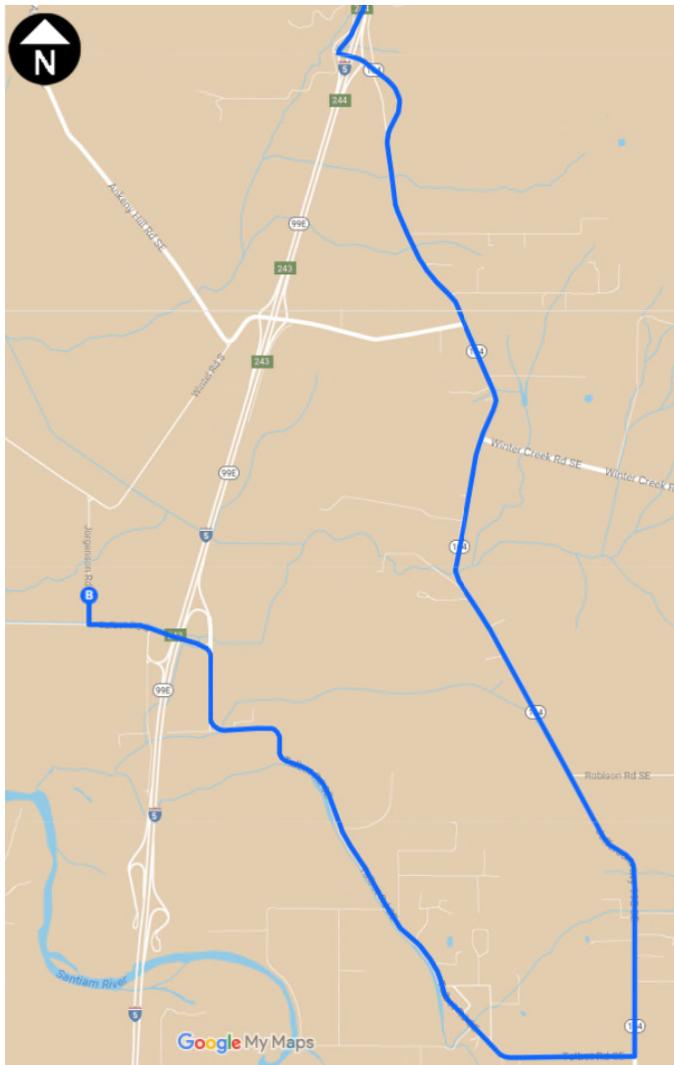


Figure 2. I-5 Southbound Contingency Route Option #2

Benefits:

- Adds 8.15 miles of queue storage space for the I-5 Southbound Traffic (approx. 1,720 vehicles)
- Utilizes Jefferson Highway (OR 99E) which has wider shoulders than County roads
- Low impact to adjacent land uses along the Jefferson Highway
- Avoids use of the poorly configured Talbot Interchange ramps for Ingress

Disadvantages:

- Would require modifications to I-5 Northbound route to use Ankeny Hill
- Higher volume of traffic on the Jefferson Highway than on County Roads
- Exit from North Jefferson interchange requires a left-turn maneuver (low conflicts)
- Would require closure of Ankeny Hill interchange to event traffic
- Potential for higher farm impacts along Talbot Road for east-west connectivity between fields/distilleries
- Requires a more difficult and pre-placed traffic control plan to switch from the primary route
- Doesn't function well with I-5 northbound attendees exiting at the Talbot interchange



Figure 3. I-5 Southbound Contingency Route Option #3

Benefits:

- Adds 8.00 miles of queue storage space for the I-5 Southbound Traffic (approx. 1,690 vehicles)
- Utilizes low-volume roads around the Ankeny Wildlife Refuge
- Low impact to adjacent land uses along the route
- Very easily modified ingress route with no change to information presented to drivers along I-5
- Simplifies pedestrian connection from parking/camping to event

Disadvantages:

- Similar to the primary route, requires provisions to prevent use of Ankeny Hill westbound across I-5 for through travel or event travel
- Joins with Liberty Road traffic flow from South Salem

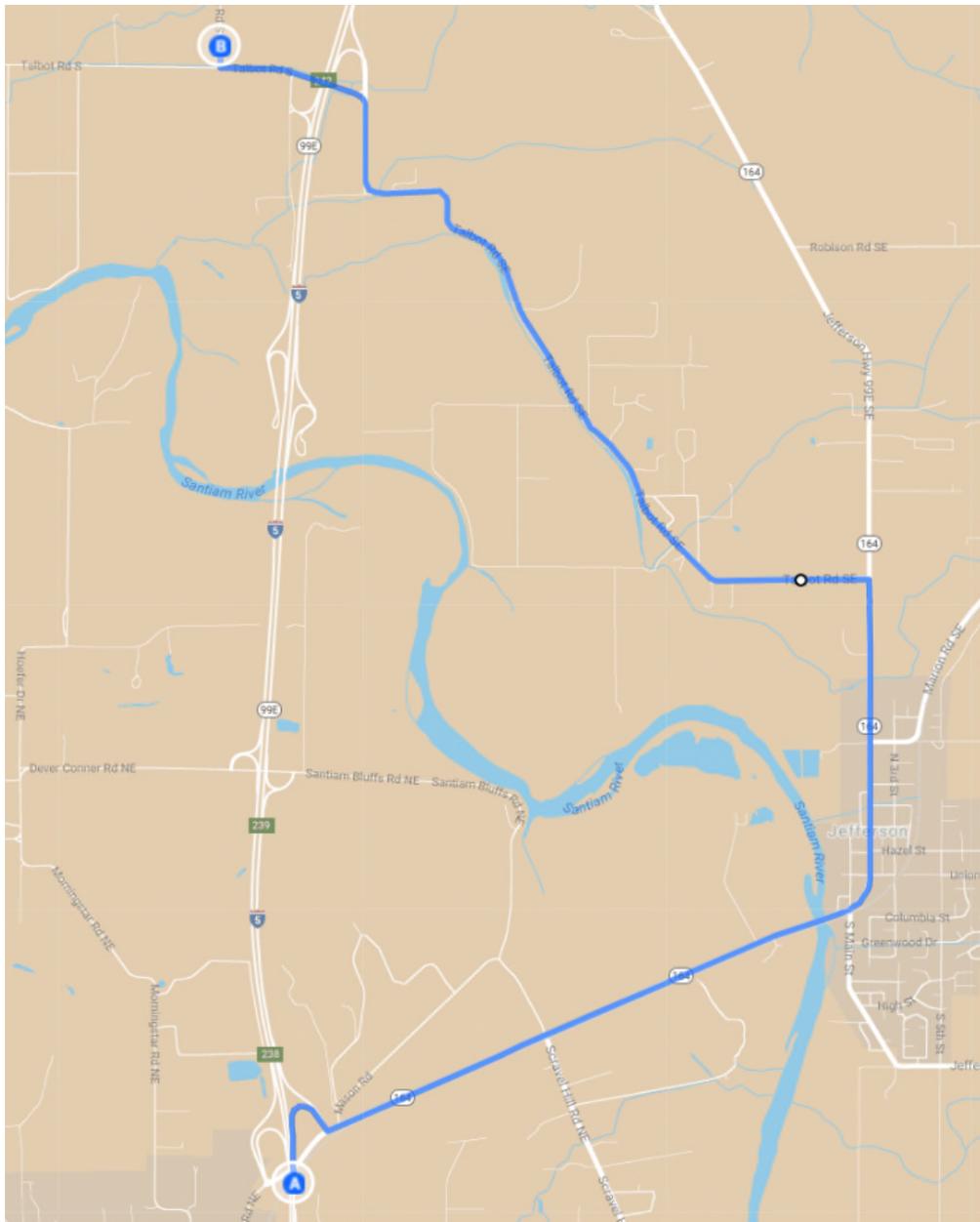


Figure 5. I-5 Northbound Contingency Route Option #2

Benefits:

- Adds 6.3 miles of queue storage space for the I-5 Northbound Traffic (approx. 1,330 vehicles)
- Simplifies use of the complex Talbot Road interchange to through movements

Disadvantages:

- Requires left-turns from I-5 at the south Jefferson Highway interchange
- Detour route through downtown Jefferson
- Potential for higher farm impacts along Talbot Road for east-west connectivity between fields/distilleries
- Requires a more difficult and pre-placed traffic control plan to switch from the primary route

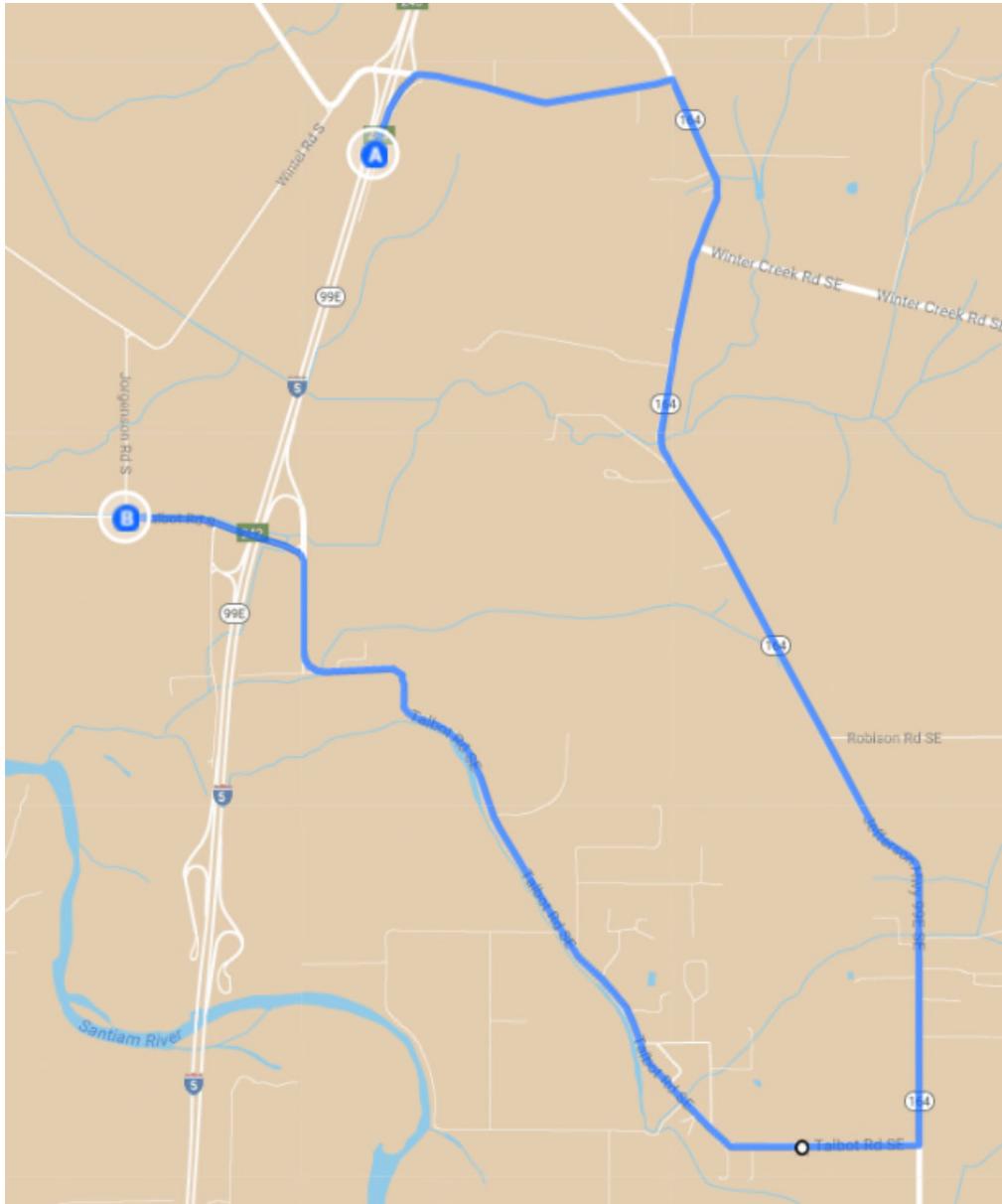


Figure 5. I-5 Northbound Contingency Route Option #3

Benefits:

- Adds 7.5 miles of queue storage space for the I-5 Northbound Traffic (approx. 1,580 vehicles)
- Simplifies use of the complex Talbot Road interchange to through movements
- Relatively simple to implement and does not conflict with I-5 Southbound Primary Route or Contingency Options #1 or #3
- Route is provided with all right-turn maneuvers that have a higher capacity

Disadvantages:

- Potential for higher farm impacts along Talbot Road for east-west connectivity between fields/distilleries
- Requires a more difficult and pre-placed traffic control plan to switch from the primary route

RECOMMENDATIONS

At this time, we recommend no changes to the primary routes. These routes, with the appropriate traffic control, and a sufficient number of driveways to the camping sites, general admission and handicap parking are suitable for accommodating forecast peak event demand with a fully sold-out festival. Contingency routes have been identified should incidents or unanticipated delays occur along these primary routes that would otherwise extend queues onto the I-5 corridor. It is our goal to reach a consensus on the preferred contingency routes at the meeting with ODOT and Marion County staff on Friday, March 9, 2018.

Thank you for the ongoing coordination and support, we look forward to further discussing these recommendations and options with the County and ODOT.