Arizona Renaissance Festival

By

Tony S. Abbo

ADOT

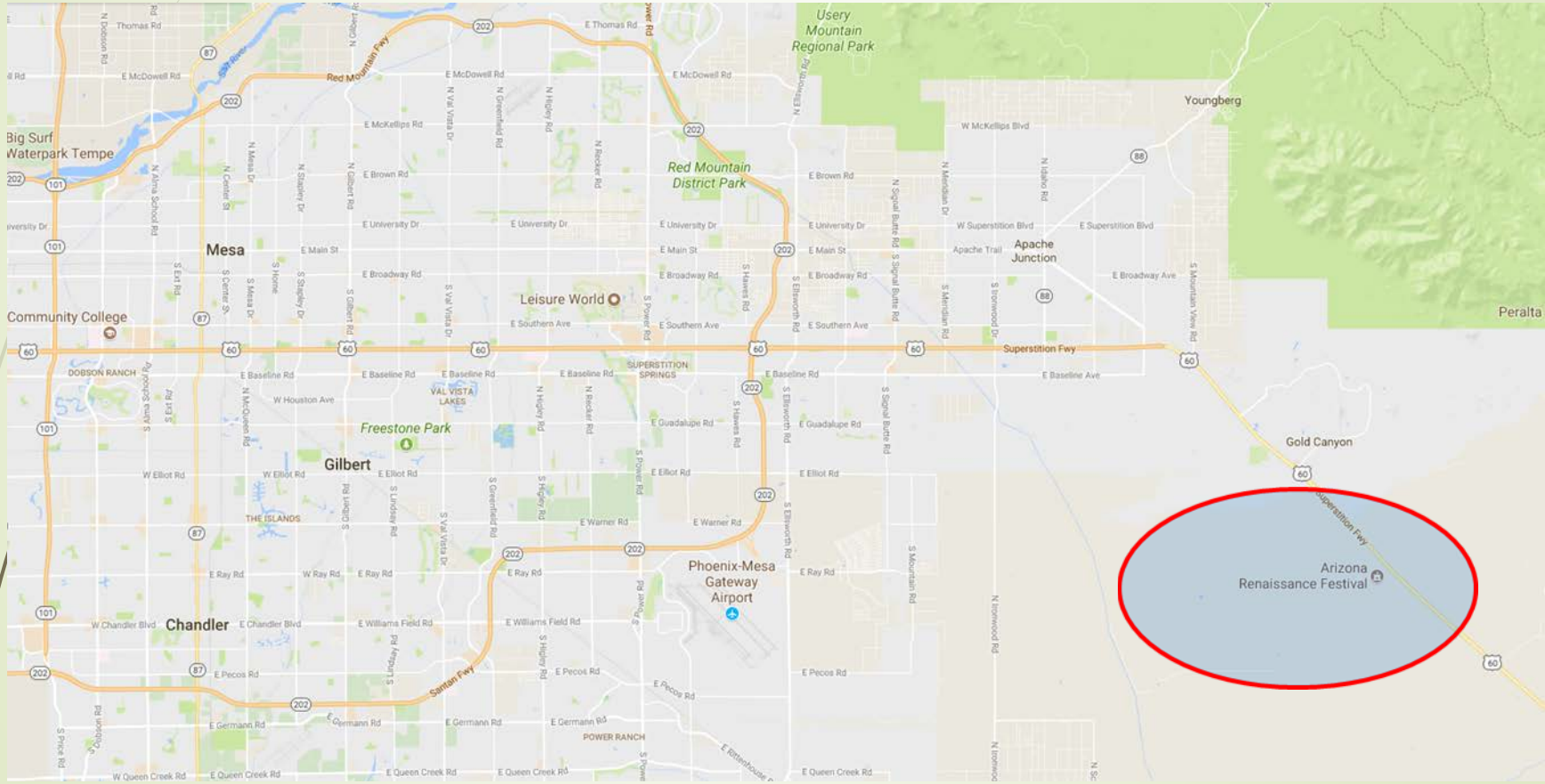
Background

- Renaissance festival grounds are located on the south side of US 60 in the vicinity of Milepost 205
- First event was held in 1989.
- Average annual attendance is in the range of 275-300,000 spread over:
  - 6 Week Period
  - 17 regular event dates
  - 2 School Program dates

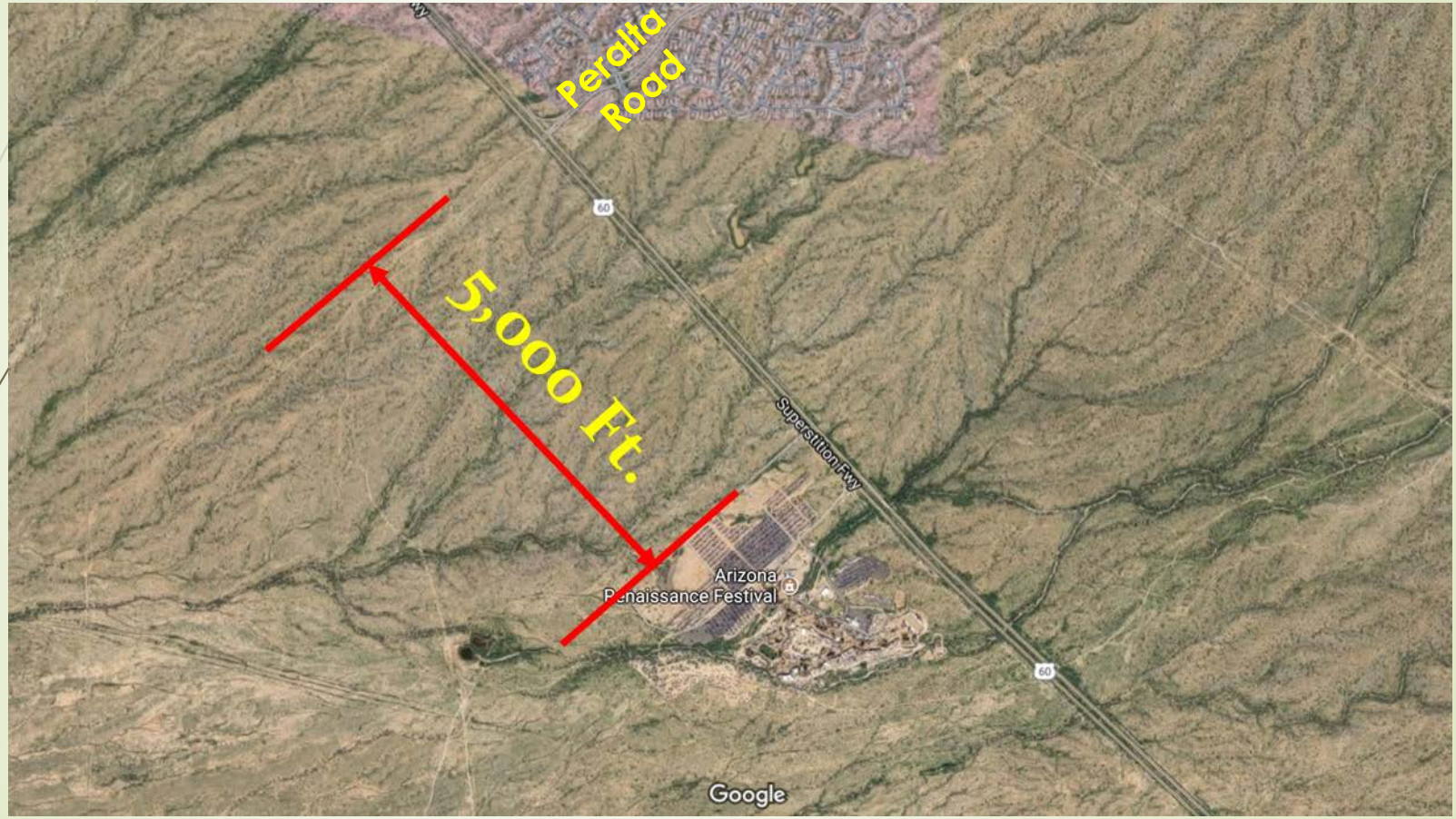
Background (Cont.)

- Event is from Mid-February to the beginning of April of each year.
- Hours are 10:00 AM to 6:00 PM (on both days)
  - Parking lot opens at 9:15 am
  - Open on Presidents Day
  - They also have school day events that are held on 2 week days
- Events are held during weekends only (except for the school day events and presidents day)

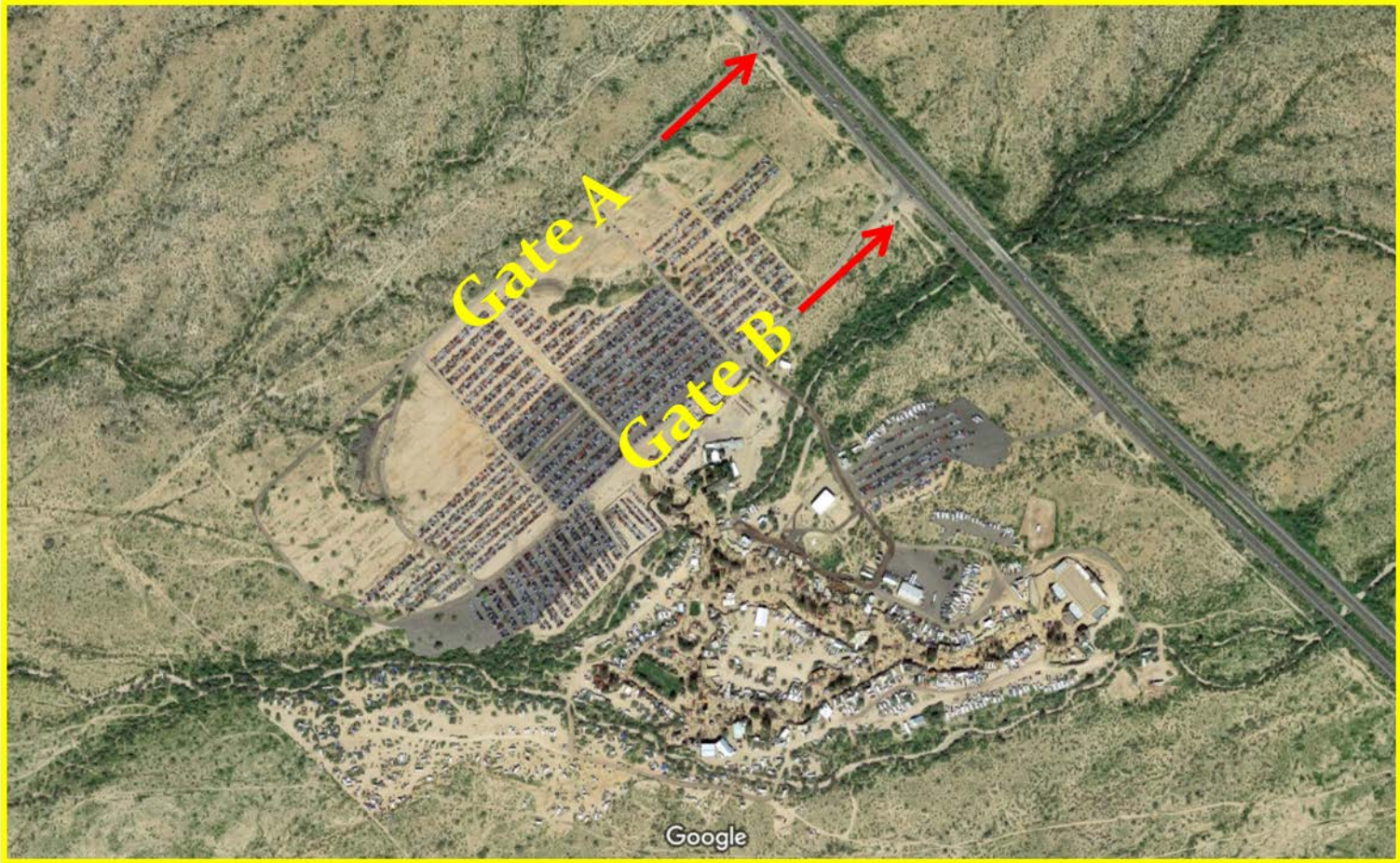
Location


Usery Mountain Regional Park
Youngberg
Big Surf Waterpark Tempe
Red Mountain District Park
Mesa
Apache Junction
Peralta
Community College
Leisure World
Superstition Fwy
Freestone Park
Gilbert
Gold Canyon
Phoenix-Mesa Gateway Airport
Arizona Renaissance Festival
Chandler
Santan Fwy

Location (Cont.)



Location (Cont.)



Coordination

- ADOT has been working closely with the following groups to ensure that impacts to the state system are minimized:
  - Renaissance Festival Organizers
  - Department of Public Safety (DPS)

Challenges

- Access to the site is from US 60
  - No secondary access
- Most of the traffic comes from the west (Phoenix metropolitan area)
- Large influx of Traffic comes between 10:00 AM and 12:00 PM
- Trend reverses from 4:00 PM to 6:00 PM
- Weather

Challenges

- Parking
  - Switching between parking lots
- Other events in the surrounding areas
- Urbanized area continues to move east
- Signal in the area between where the freeway ends and the festival grounds

Challenges

- People that do not read signs and end up in the wrong lane

Meetings

- As part of our standard operating procedure relating to this event, ADOT performs the following
  - Pre-event meeting
  - Inspections during the event
  - Post-event meeting
  - Meet with any groups (meetings are upon request

Items that were added to the 2018 event

Increased the Radius at Gate A

- Allows vehicles to enter into the facility at a higher speed thus enabling the gate to service more vehicles per hour

Dual Entry into gate A

- Two entry lanes on EB 60
- Lane utilization was not good – all drivers stayed in the right lane
- Experimented with several variations all yielded same result – Concept dropped

Dual Entry into gate A

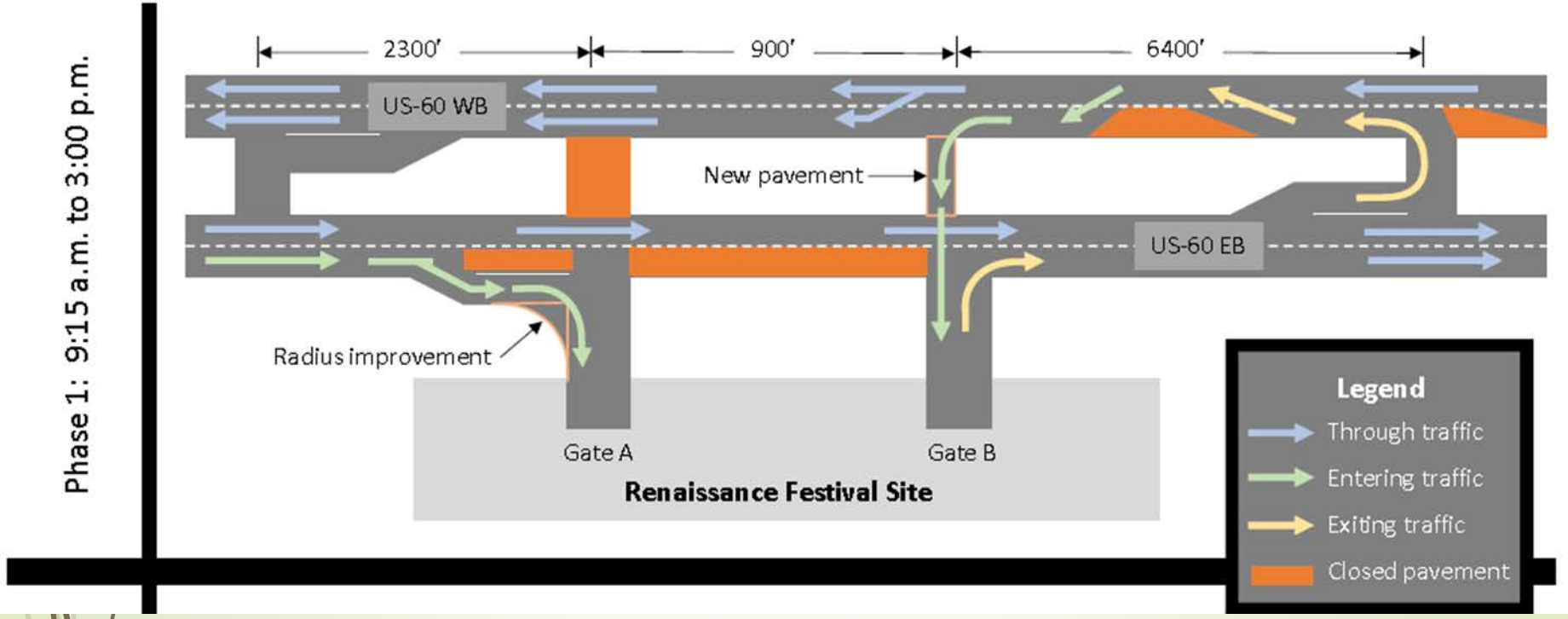
Improvements to Gate B

- Allowed Left in movement from WB US 60 at gate B – Constructed crossover – Open only during event

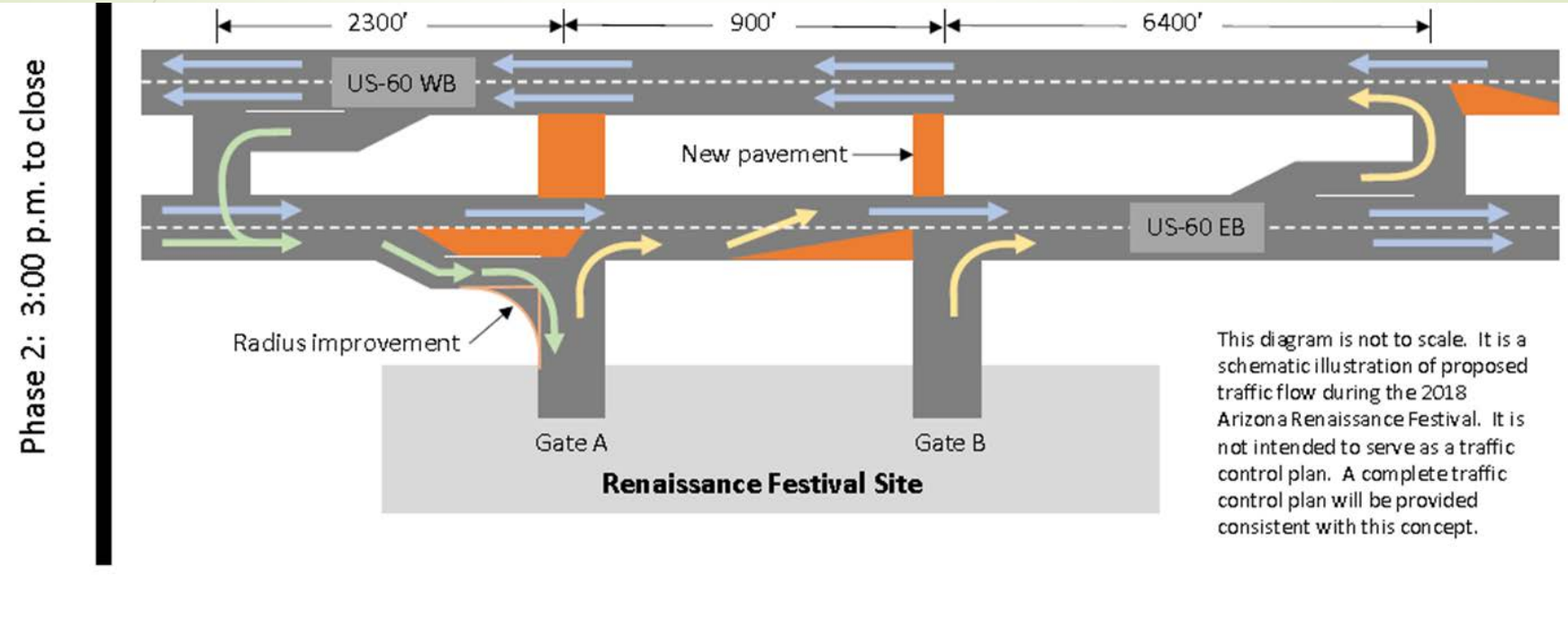
Improvements to Gate B

- Median is closed expect for the weekends when the event is in place

Traffic Control - Morning Plan



Traffic Control - Afternoon Plan



Collected Travel Time

- Before Condition (with no event Traffic)
- From the Tomahawk T.I. to Gate A
- Free Flow time was approx. 8 Min

Renaissance Festival Travel Times

Free-flow Conditions

Date	Start Time at Initial Location	Tomahawk	Goldfield	Mountain View	Superstition Mountain	Mountainbrook	Kings Ranch Road	Peralta	Gate A	Total Time (H:M:S)
3/2/2018	9:00:00 AM	9:00:00 AM	9:01:08 AM	9:02:12 AM	9:03:51 AM	9:04:51 AM	9:05:43 AM	9:07:23 AM	9:08:20 AM	0:08:20
Time from Prior location			0:01:08	0:01:04	0:01:39	0:01:00	0:00:52	0:01:40	0:00:57	

Collected Travel Time

- During the event (with improvements)
- Peak delay was 14 min

Date	Start Time at Initial Location	Tomahawk	Goldfield	Mountain View	Superstition Mountain	Mountainbrook	Kings Ranch Road	Peralta	Gate A	Total Time (H:M:S)
3/3/2018	9:00:00 AM	9:00:00 AM	9:01:02 AM	9:02:25 AM	9:04:03 AM	9:05:59 AM	9:07:29 AM	9:09:22 AM	[illegible] AM	0:10:35
Time from Prior location			0:01:02	0:01:23	0:01:38	0:01:56	0:01:30	0:01:53	0:[illegible]	
3/3/2018	10:00:00 AM	10:00:00 AM	10:00:58 AM	10:02:57 AM	10:08:02 AM	10:09:57 AM	10:10:54 AM	10:12:48 AM	10:14:16 AM	0:14:16
Time from Prior location			0:00:58	0:01:59	0:05:05	0:01:55	0:00:57	0:01:54	0:01:28	
3/3/2018	11:00:00 AM	11:00:00 AM	11:00:58 AM	11:01:59 AM	11:05:32 AM	11:07:05 AM	11:08:12 AM	11:10:23 AM	11:11:49 AM	0:11:49
Time from Prior location			0:00:58	0:01:01	0:03:33	0:01:33	0:01:07	0:02:11	0:01:26	
3/3/2018	12:00:00 PM	12:00:00 PM	12:00:58 PM	12:01:59 PM	12:04:10 PM	12:05:48 PM	12:06:49 PM	12:08:58 PM	12:10:15 PM	0:10:15
Time from Prior location			0:00:58	0:01:01	0:02:11	0:01:38	0:01:01	0:02:09	0:01:17	
3/4/2018	9:00:00 AM	9:00:00 AM	9:01:02 AM	9:02:15 AM	9:03:49 AM	9:04:51 AM	9:07:30 AM	9:09:10 AM	[illegible] AM	0:10:33
Time from Prior location			0:01:02	0:01:13	0:01:34	0:01:02	0:02:39	0:01:40	0:[illegible]	
3/4/2018	10:00:00 AM	10:00:00 AM	10:01:05 AM	10:01:58 AM	10:06:40 AM	10:08:57 AM	10:09:49 AM	10:11:42 AM	10:13:06 AM	0:13:06
Time from Prior location			0:01:05	0:00:53	0:04:42	0:02:17	0:00:52	0:01:53	0:01:24	
3/4/2018	11:00:00 AM	11:00:00 AM	11:01:04 AM	11:02:03 AM	11:04:32 AM	11:06:39 AM	11:07:59 AM	11:10:12 AM	11:11:44 AM	0:11:44
Time from Prior location			0:01:04	0:00:59	0:02:29	0:02:07	0:01:20	0:02:13	0:01:32	
3/4/2018	12:00:00 PM	12:00:00 PM	12:01:05 PM	12:02:03 PM	12:03:41 PM	12:04:39 PM	12:05:35 PM	12:07:30 PM	12:08:40 PM	0:08:40
Time from Prior location			0:01:05	0:00:58	0:01:38	0:00:58	0:00:56	0:01:55	0:01:10	

Images from the Drone

Images from the Drone

Images from the Drone

9:30 AM

Images from the Drone

10:00 AM

Images from the Drone

10:45 AM

Images from the Drone

11:30 AM

Images from the Drone

12:20 PM

Success

- Reduce queue length from 11 miles to just under three miles
- Reduce travel times for those that are not destined to the event

2019 Plan

- No changes from last years plan
- Continue to collect Traffic Data
  - Collecting Hourly Volumes during 4 weekends
  - Collecting eastbound and westbound Traffic Travel times on 2 separate weekend
- Performance of the plan will be reviewed following the 2019 event

Questions