



Kimley»Horn

Mercedes-Benz Stadium

Rethinking Gameday
Traffic Operations



Mike Blanchette, PE
February 27, 2019

Agenda

- Special Events Planning
- Development of Plans
- Implementation of Plans
- College Football National Championship
- Super Bowl LIII

Partnership




Kimley Horn

Planning






GEORGIA
WORLD
CONGRESS
CENTER

 **State Farm**
ARENA

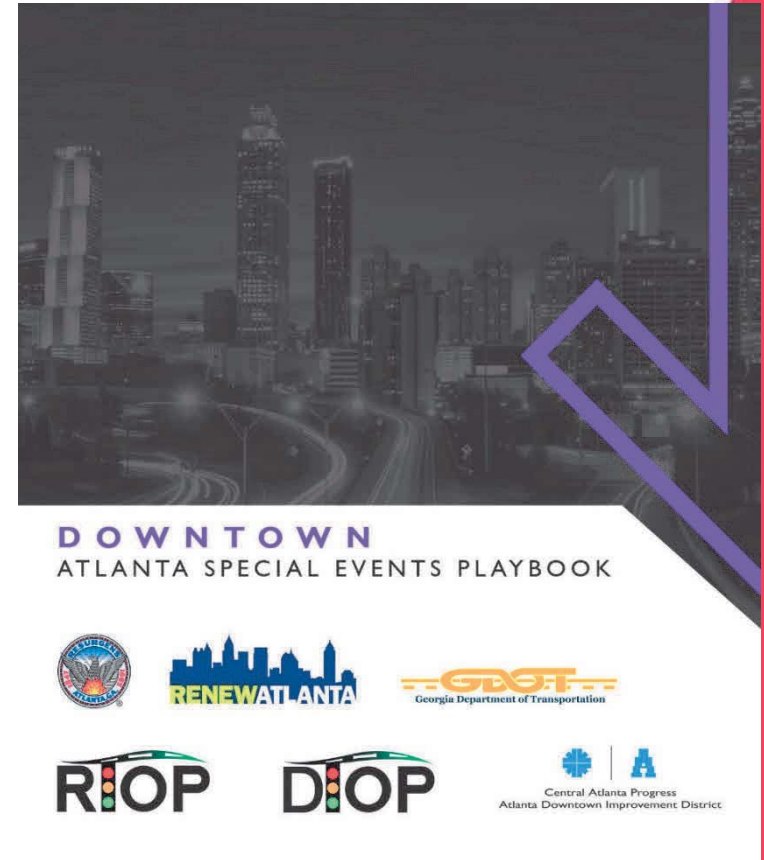

Mercedes-Benz
STADIUM

Comprehensive Special Events Plan

- Prior to 2017, all venues had separate plans, with varying levels of sophistication, and minimal coordination between venues
 - Minimal use of signal timing
 - Typical Georgia Dome event, 100+ signals in flash
 - Multiple public agencies involved in permitting process, with minimal coordination
 - “Road closure permit for party food delivery, during heart of Chick Fil A Kickoff Classic Ingress”
- Comprehensive special events planning effort began by CAP in Summer 2017
 - Funded through Downtown CTP study
 - “Downtown Atlanta Special Events Playbook”
 - Initially a “high level” organization of all venues traffic plans with additional coordination recommendations

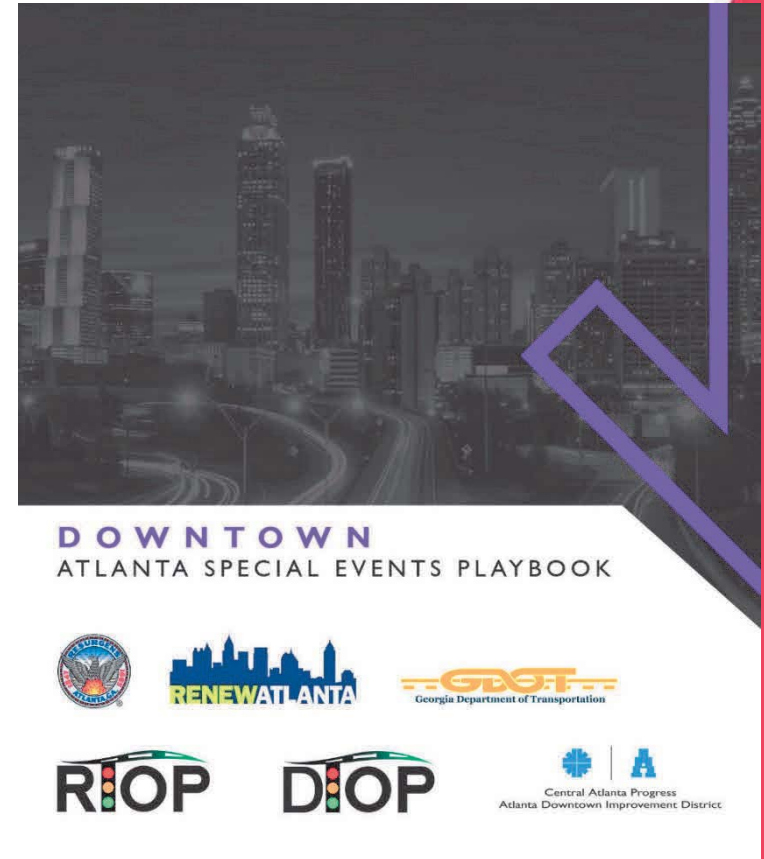
Playbook Guiding Principals

- Provide for safe, reliable, and efficient vehicular and pedestrian event flow and minimize impacts to neighboring communities
- Leverage available infrastructure and technology through collaborative partnerships and cultural shifts
- Recognition that Downtown Atlanta plays host to numerous special events, often occurring in an overlapping manner across multiple venues and facilities.
 - MBS - 71,000 seats, expandable to 83,000
 - Phillips Arena – Top 10 worldwide concert venue in ticket sales
 - GWCC – 3rd largest convention center in US
 - Top 5 tourist destination in US – over 50 million visitors per year
 - Georgia just passed Hollywood for #1 filming location in the world



Development of Playbook

- High-level planning effort quickly evolved into full traffic plan development and operations
- Levels of event management and coordination established
- New holistic development of special event traffic plans
- Special event signal timing plans developed
- Sprint
 - August 26, 2017 (*Falcons Preseason Game – MBS Opener*)
- Marathon
 - 2017 Atlanta Falcons / Atlanta United season
 - January 8, 2018 (*College Football National Championship*)



Event Management Levels



Increasing Event(s) Population →

10k



25k



50k



Recommended Management

WEEKDAY	<ul style="list-style-type: none"> - Rush hour traffic management - On-call event traffic manager 	<ul style="list-style-type: none"> - Rush hour traffic management - 1 active event traffic manager - Contraflow likely - Coordinate with TMC for interstate signs 	<ul style="list-style-type: none"> - Rush hour traffic management - 2 active event traffic managers - Multiple contraflows likely - Coordinate with TMC for interstate signs - On-call state highway signal management (RTOP/DTOP) 	<ul style="list-style-type: none"> - Rush hour traffic management - 3 active event traffic managers - Multiple contraflows required - Coordinate with TMC for interstate signs - Active state highway signal management (RTOP/DTOP) - Ramp meter management
WEEKEND	<ul style="list-style-type: none"> - On-call event traffic manager 	<ul style="list-style-type: none"> - 1 active event traffic manager - Contraflow likely - Coordinate with TMC for interstate signs 	<ul style="list-style-type: none"> - 2 active event traffic managers - Multiple contraflows likely - Coordinate with TMC for interstate signs - On-call state highway signal management (RTOP/DTOP) 	<ul style="list-style-type: none"> - 3 active event traffic managers - Multiple contraflows required - Coordinate with TMC for interstate signs - Active state highway signal management (RTOP/DTOP) - Ramp meter management

Increasing Event(s) Population →

10k



25k



50k



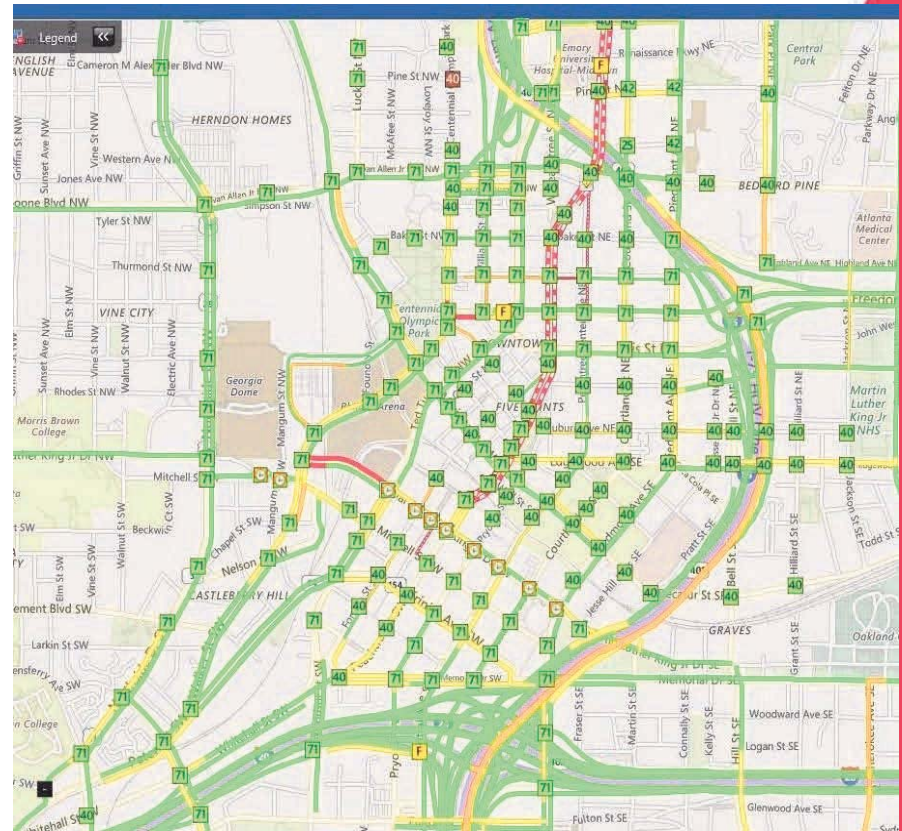
Officer Assistance

- Officers work with traffic signal timing – minimal signals in flash
- Officers focus on vehicular and pedestrian safety
 - Officer's primary role is separating pedestrians from traffic
 - Officer's secondary role is restricting vehicles from "blocking the box"
- Officer safety is enhanced and staffing can be reduced by allowing the signal timing to control intersections



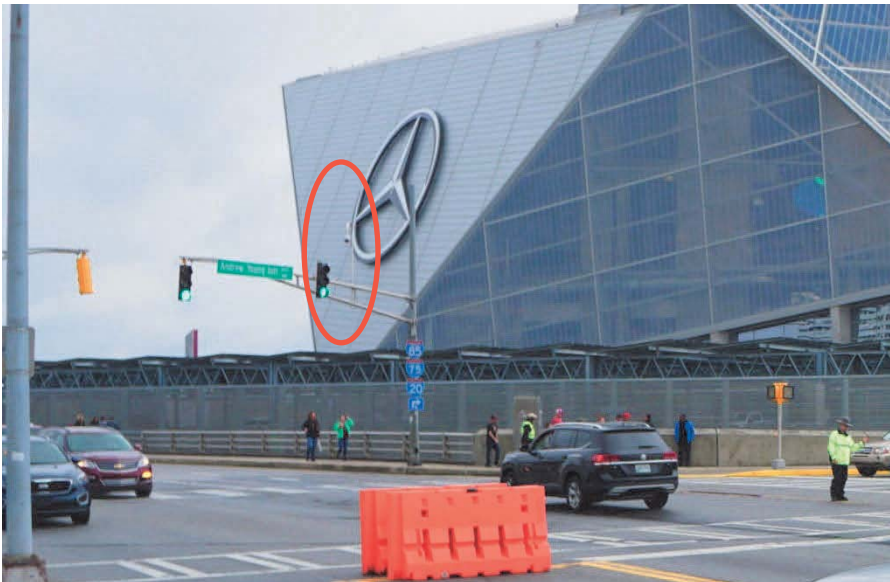
Signal / ITS Upgrades

- GDOT / DTOP / RTOP
 - Prior to 2017
 - Limited special event timings
 - No coordination with Police and venues
 - < 25% communication to signals
 - Early 2017
 - MaxTime / MaxView Conversions
 - 4G Communication – 100% communication to signals



Signal / ITS Upgrades

- Renew Atlanta
 - 40+ CCTVs installed
 - 5 Blank-out signs
 - 16 Cabinet Upgrades
 - Flashing Yellow Arrows
 - Data Collection and Detection Devices



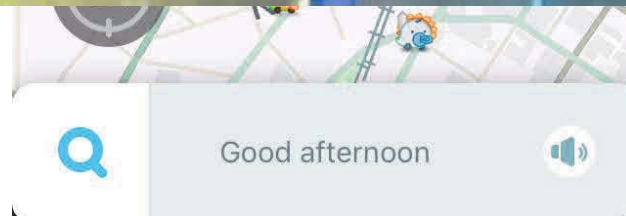
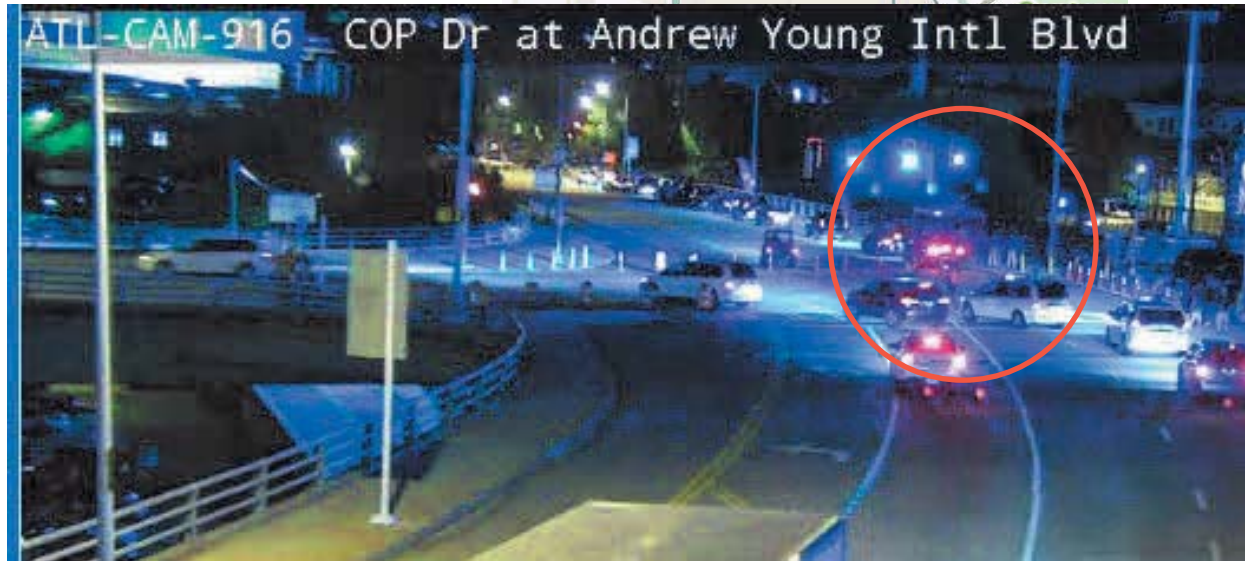
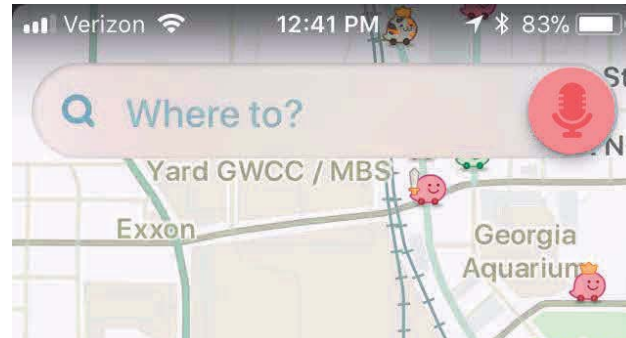
Additional Partnerships

- GDOT ITS
 - Typical event Interstate DMS messaging

I-75 SB BEFORE MT PARAN	CMS-012	MERCEDES BENZ STADIUM USE EXIT 252 NORTHSIDE DR	21 12 12
	2ND PHASE 3RD ROW		0
I-75 SB S OF MOORES MILL	CMS-013	MERCEDES BENZ STADIUM EXIT 252 NORTHSIDE DR EXIT 249A COURTLAND	21 21 19
	2ND PHASE 3RD ROW		0

Additional Partnerships

- GDOT ITS
- Rideshare
- Waze

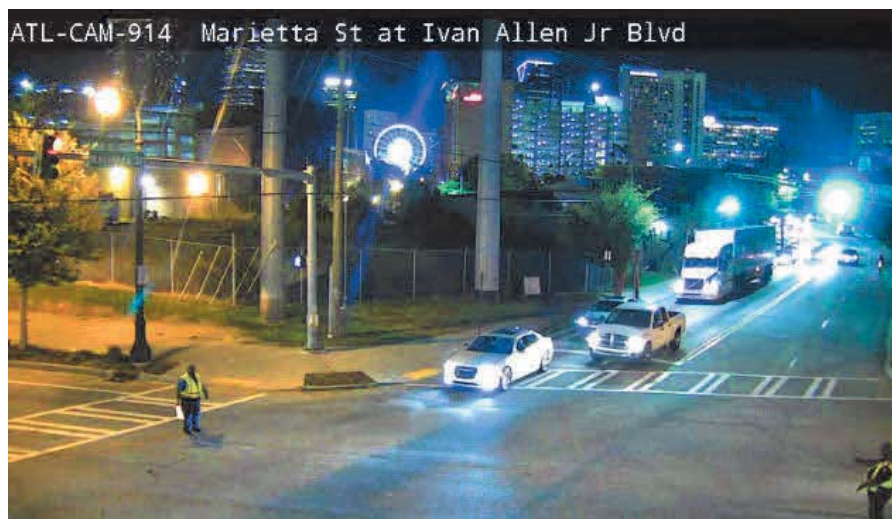


Development



Traffic Plan Development

- Officers work with traffic signal timing
 - Minimal signals in flash
- Road Closures
- Turn Restrictions
- Contraflow Corridors
- Police Locations
- Rideshare Locations

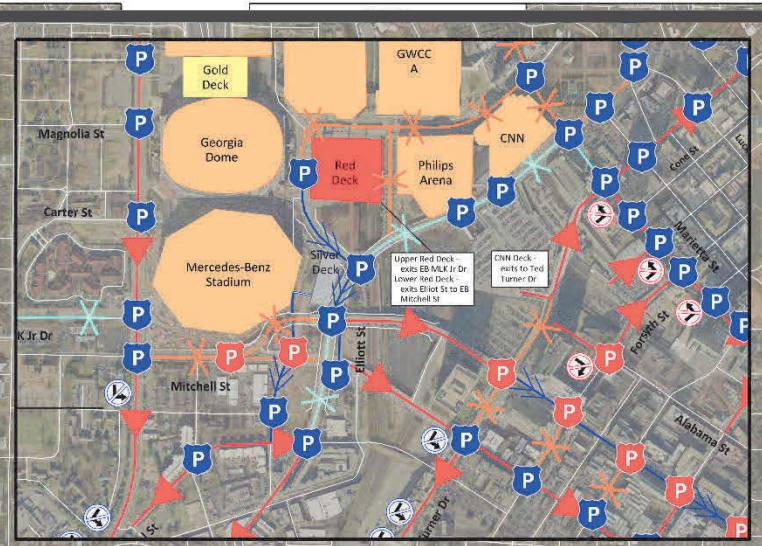
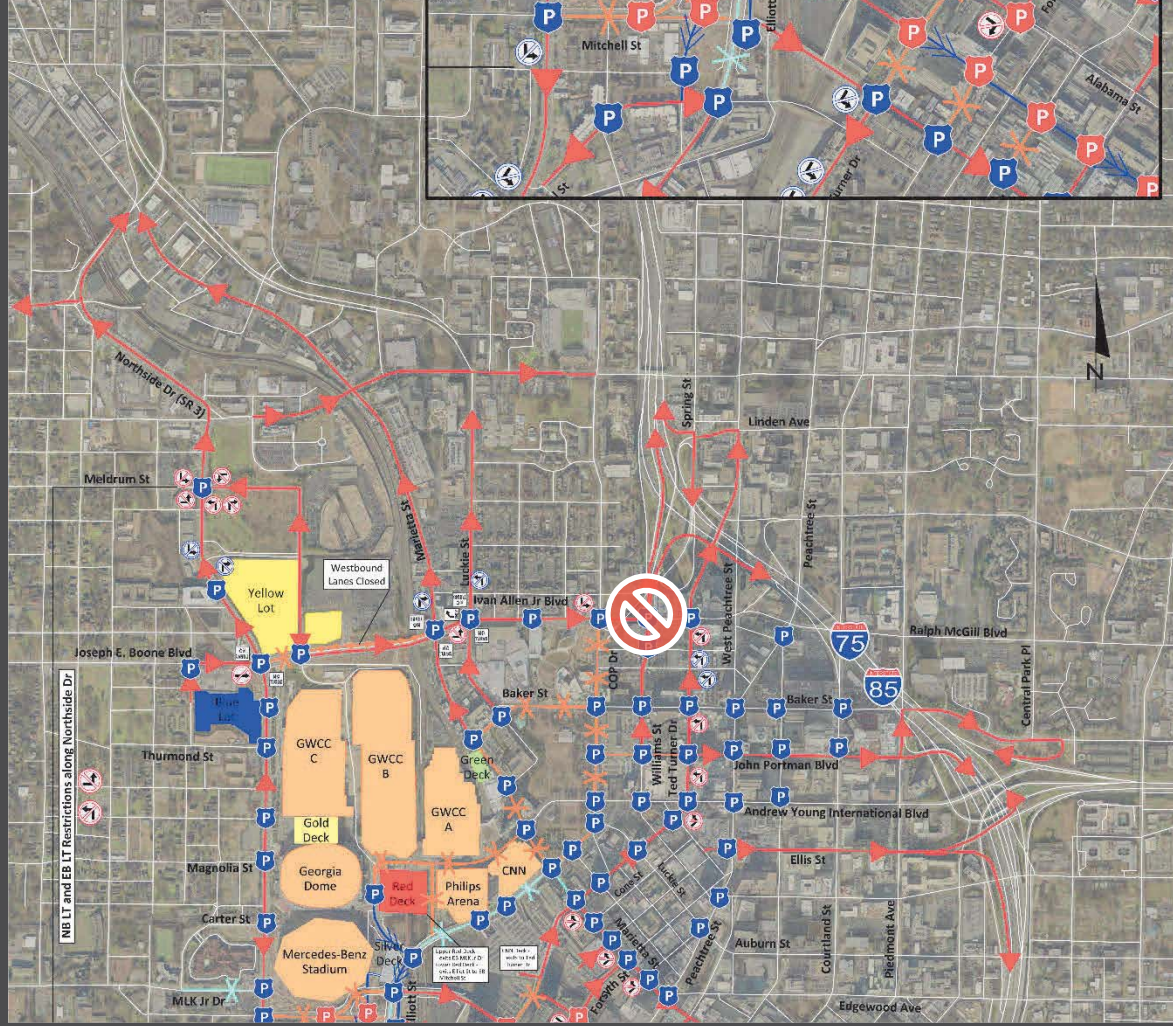


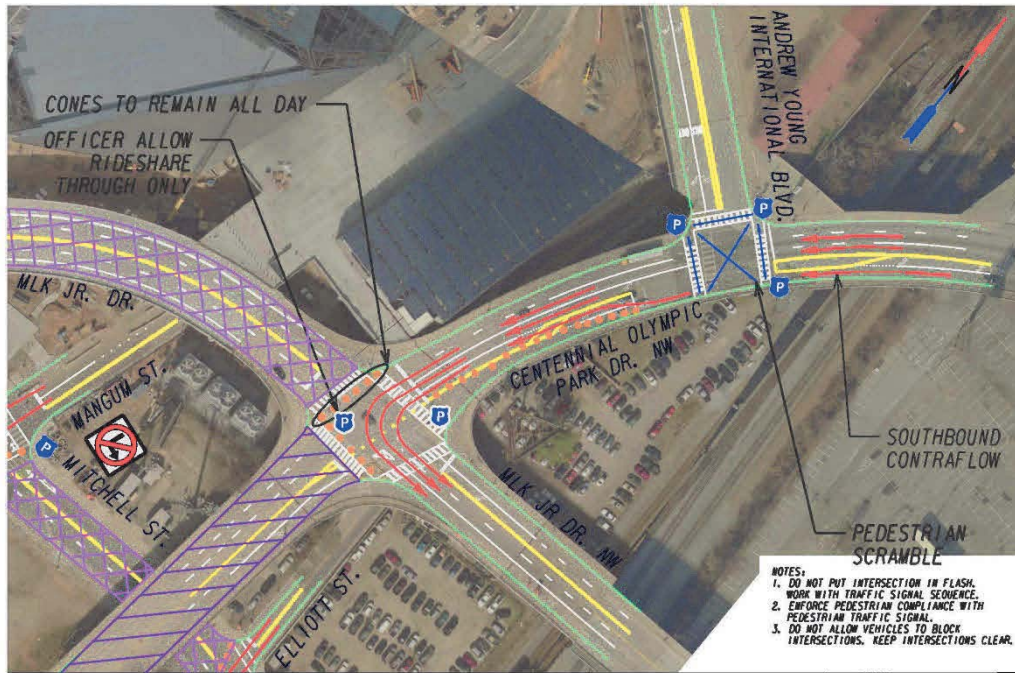
- LEGEND**
- Ingress Route
 - Closed Corridor
 - Full Contraflow Corridor
 - Rideshare Corridor Only
 - Stationed Officer(s)
 - Stationed Officer(s) - Signal in Flash



DOWNTOWN SPECIAL B CFP NATIONAL CHAMPION

- LEGEND**
- Egress Route
 - Closed Corridor
 - Full Contraflow Corridor
 - Rideshare Corridor Only
 - Stationed Officer(s)
 - Stationed Officer(s) - Signal in Flash
 - Waze-Enforced-Only Turn Restrictions
 - Officer- & Waze-Enforced Turn Restrictions



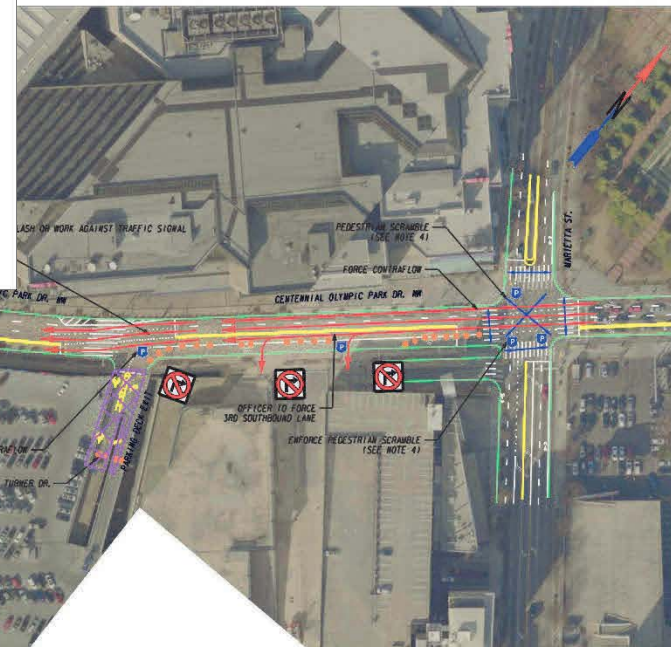


DOWNTOWN SPECIAL EVENTS PLAN
CONCEPTUAL INTERSECTION LAYOUT 3b

CENTENNIAL OLYMPIC PARK DR. FROM
MLK JR. DR. TO
ANDREW YOUNG INTERNATIONAL BLVD.
EGRESS

Kimley»Horn

Engineering, Planning, and Environmental Consultants
Suite 400, 87 West Peachtree Street, NW
Atlanta, GA 30308



DOWNTOWN SPECIAL EVENTS PLAN
CONCEPTUAL INTERSECTION LAYOUT 9b

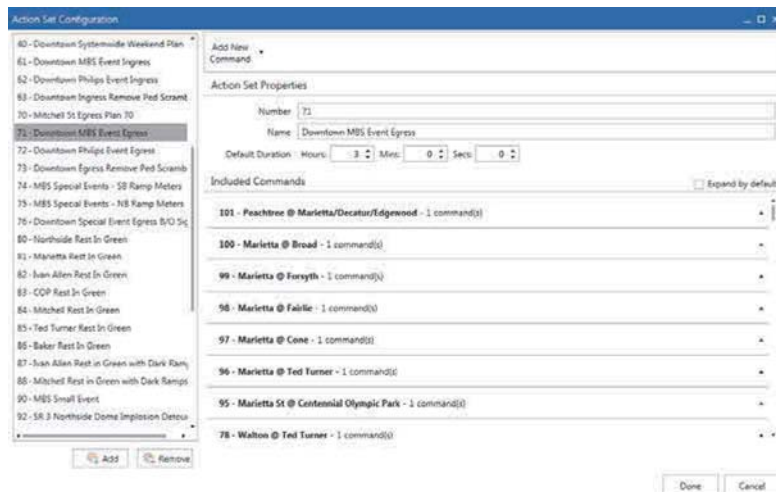
CENTENNIAL OLYMPIC PARK DR.
FROM PARKING DECK ENTRANCE
TO MARIETTA ST.
EGRESS

Kimley»Horn

Engineering, Planning, and Environmental Consultants
Suite 400, 87 West Peachtree Street, NW
Atlanta, GA 30308

Signal Timing

- Multiple Ingress / Egress Patterns
- Pedestrian Scrambles by TOD
- Ped Pulses
- Ped Holds
- Phase Holds
- Rest in Green Flush Plans (Preempt)
- Action Sets
- Training/SOP



Special Events SOP

11. Check to see if any intersections are running in free/flash (that aren't set to run in flash/officer control per Egress plan), and address in field ASAP if critical.

- Hover over intersection that has an "alarm"
- Look for flash alarm



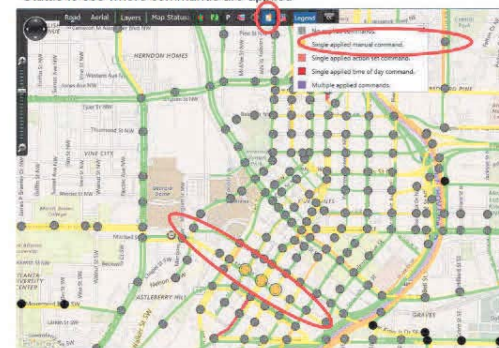
12. Check to see if any intersections do not have communication, and address in the field ASAP if critical

- Look for grey icon
- May require a 4G router reset and/or controller reset

13. If large scale plan push downs are required, utilize Action Sets (Device Control > Action Set Control)

- Add Action Set, set start and end time
 - 61 – Downtown Special Event Ingress
 - Call up Ingress early at all intersections
 - Extend Ingress past scheduled end time
 - 71 - Downtown Special Event Egress
 - Call up Egress early at all intersections
 - Extend Egress past scheduled end time
 - If it's a late game and Egress extends past midnight, **MUST call up this action.**
 - 80-88 – Rest in Green Plans for corridors
 - Do not set for longer than 6 minutes (two cycles)
 - Action 87 and 88 are to disable ramp meters at Williams Street and MLK St during Ivan Allen and Mitchell St Rest in Green plans

14. If you push down a Manual Plan or Action Set, be certain to double check Applied Command Status to see where commands are applied



Updated: 3/14/2018

Page | 4

Pedestrian Scramble



Pedestrian Holds

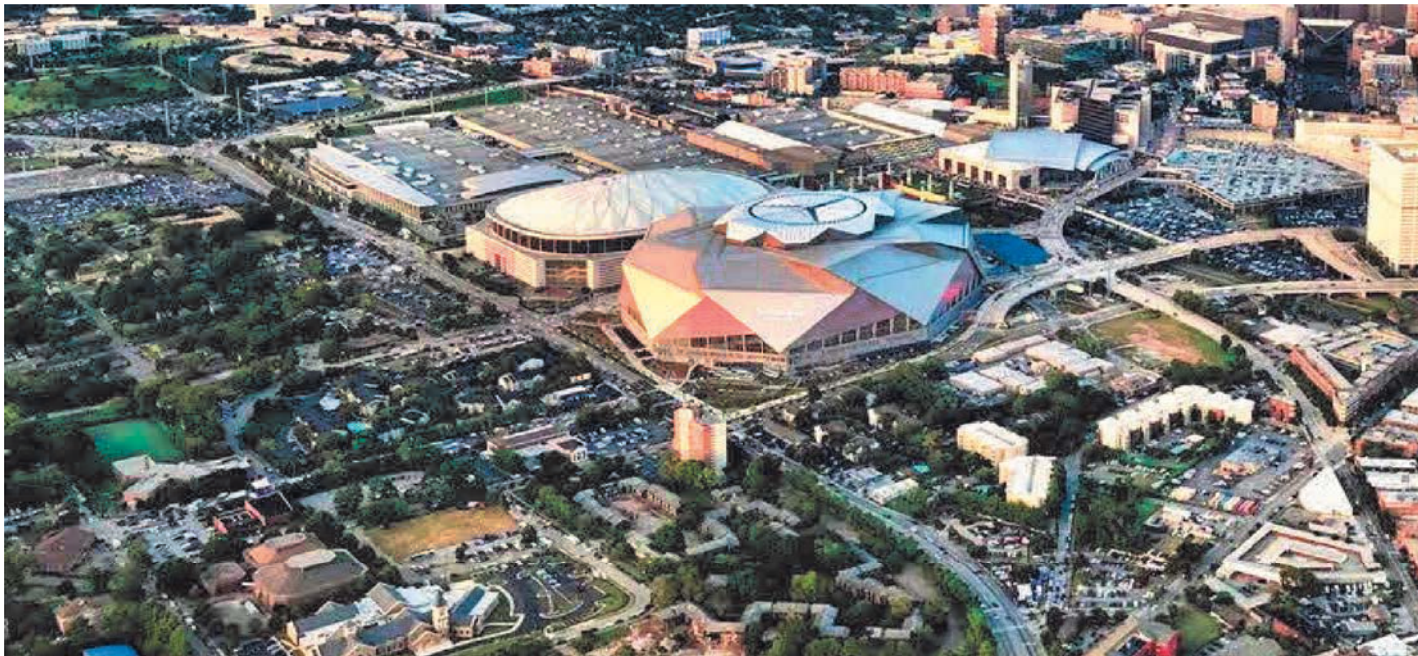


Implementation



Events Managed

- Birthday Bash at Phillips Arena
 - Tested special event timings in coordination with Police
 - Typical 90 minute egress cut to 45 minutes
- MBS Opener – Falcons Preseason Game
 - Full implementation of plan
- Chick Fil A Kickoff Classic
 - First “real” game



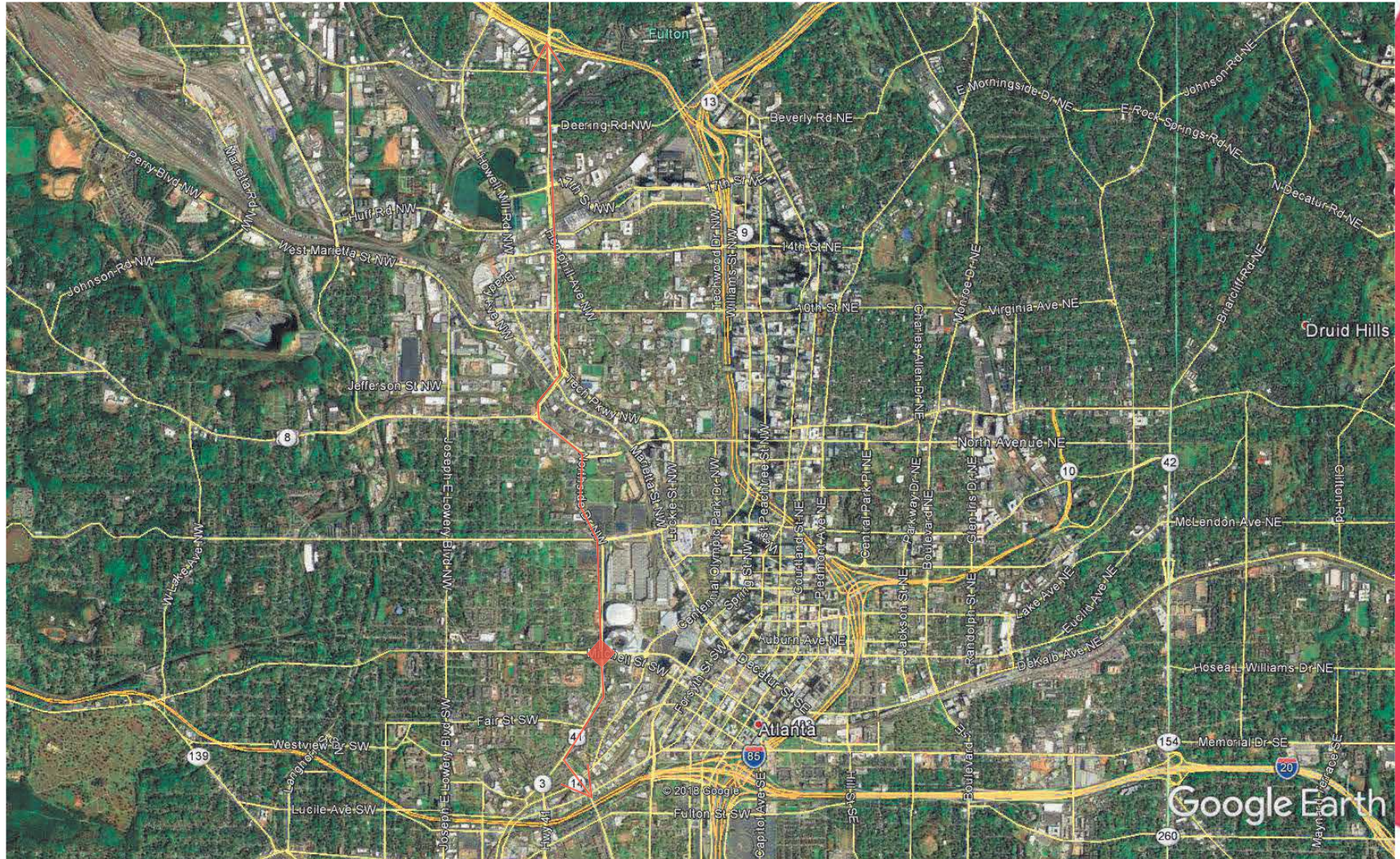
Events Managed

- Birthday Bash at Phillips Arena
 - Tested special event timings in coordination with Police
 - Typical 90 minute egress cut to 45 minutes
- MBS Opener – Falcons Preseason Game
 - Full implementation of plan
- Chick Fil A Kickoff Classic
 - First “real” game
- Atlanta United matches
 - 2 broke MLS Attendance record (over 70,000)
 - Average 45-60 minute Egress
- Atlanta Falcons games
 - Average 60-75 minute Egress
- Garth Brooks concert
 - Highest attendance at MBS – over 80,000
- SEC Championship
- Peach Bowl
- College Football National Championship
- Super Bowl LIII

RITIS Analysis

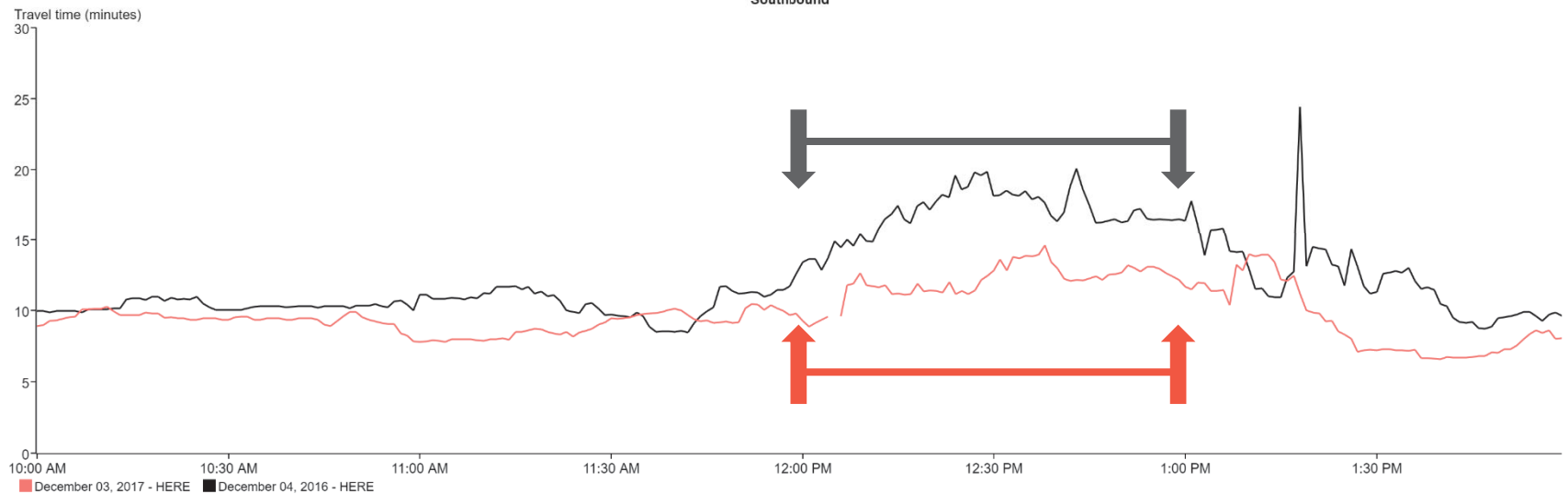
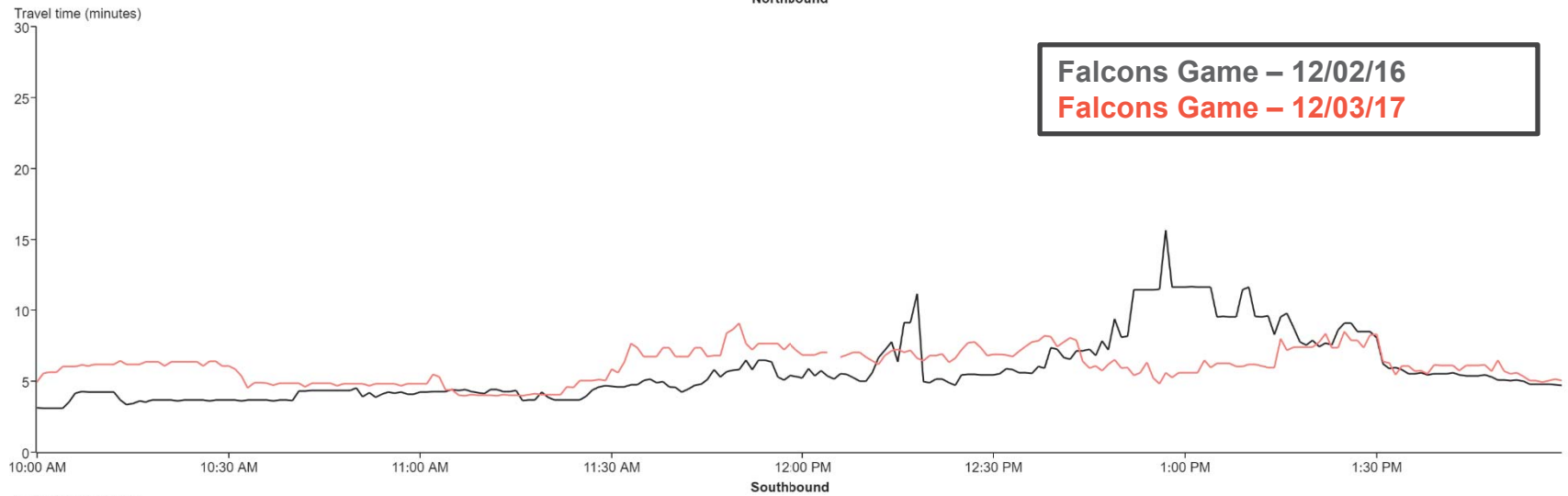


RITIS Analysis



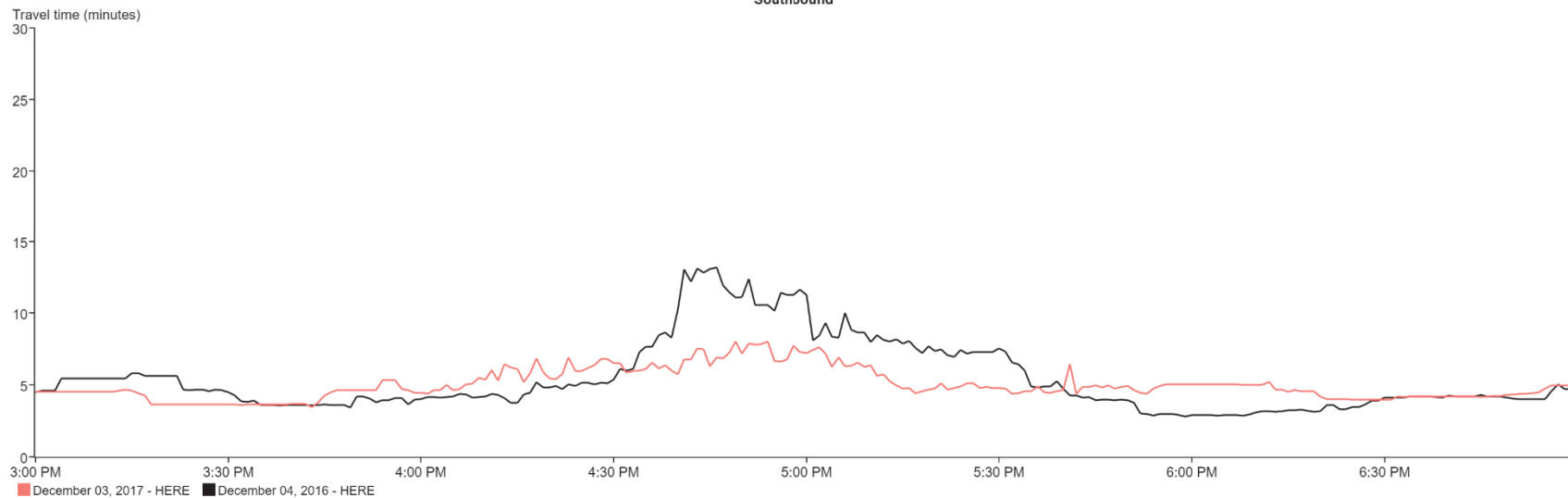
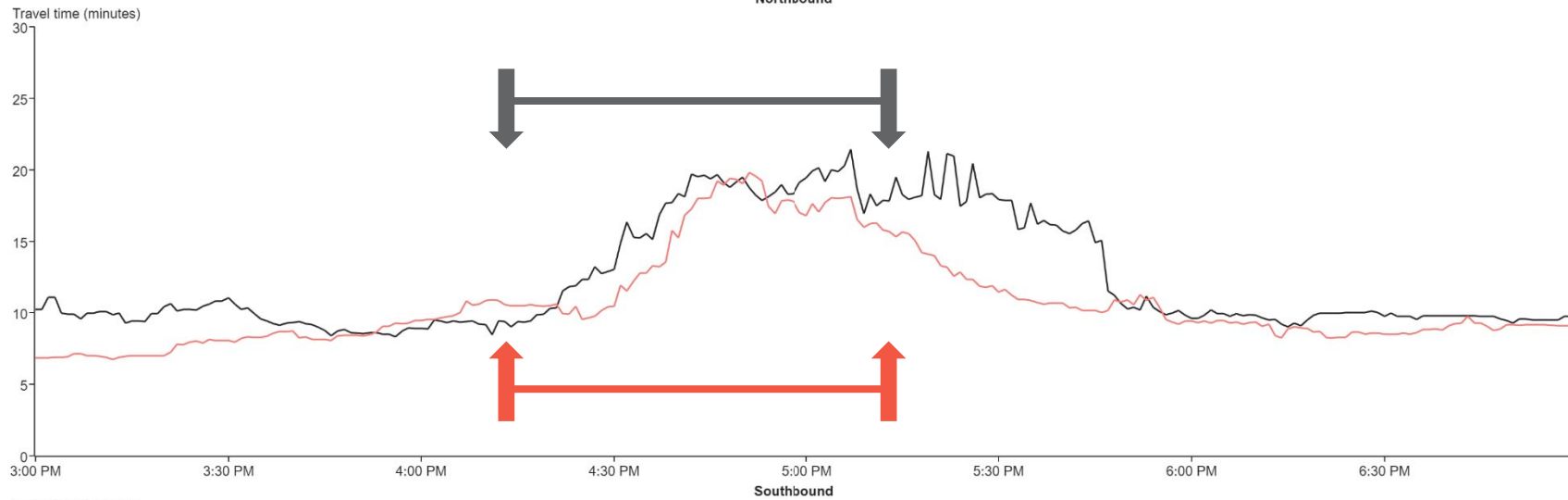
RITIS Analysis

Comparison 1 Northside Ingress
Averaged per minute for December 04, 2016 and December 03, 2017
Northbound



RITIS Analysis

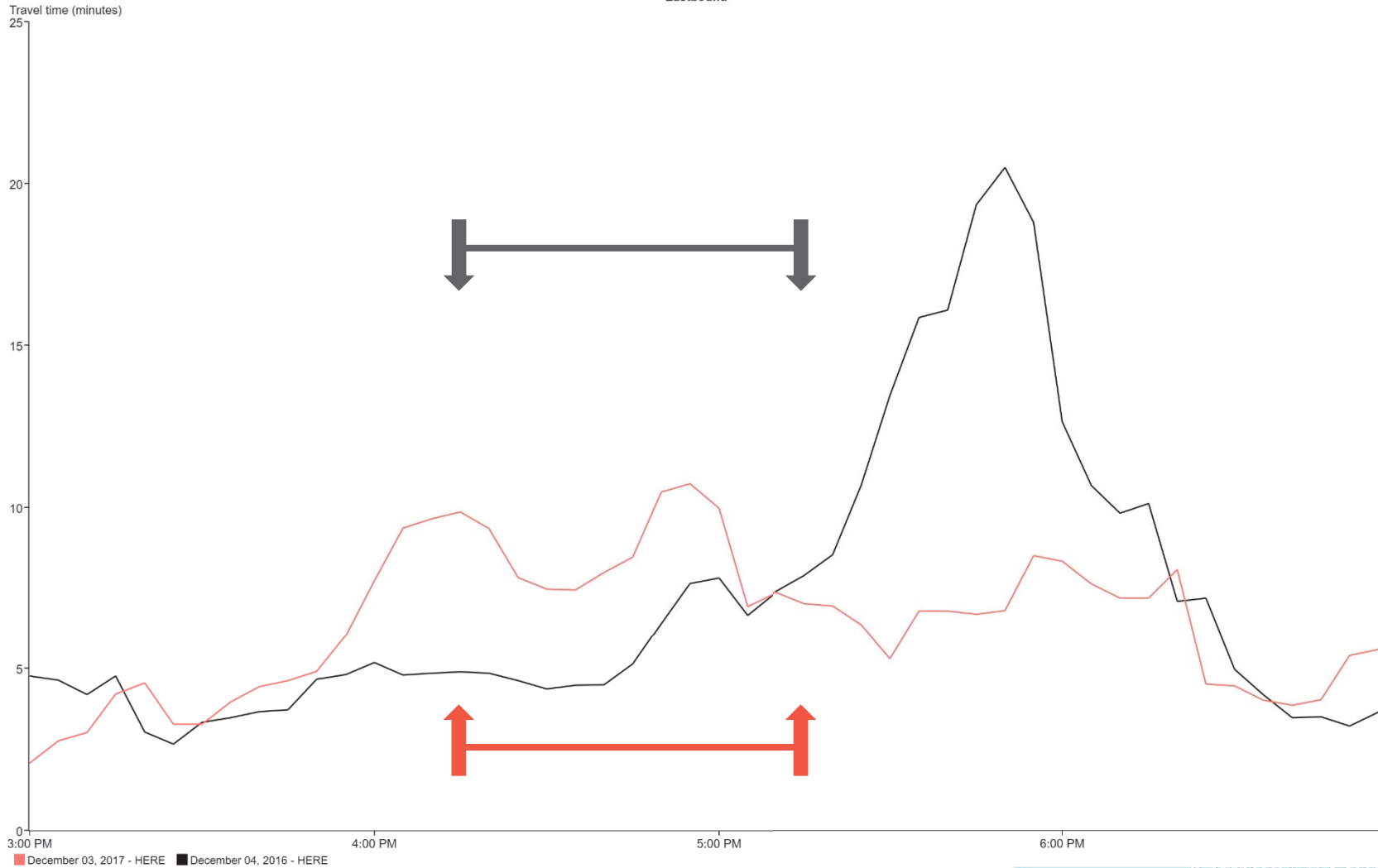
Comparison 1 Northside Egress
Averaged per minute for December 04, 2016 and December 03, 2017
Northbound



December 03, 2017 - HERE December 04, 2016 - HERE

RITIS Analysis

Comparison 1 Ivan Allen Egress - Travel Time
Averaged per five minutes for December 04, 2016, December 03, 2016
Eastbound



National Championship





GDOT
Georgia Department of Transportation

Google Earth

Timeline

- ~12:00 – Begin monitoring Ingress operations
 - Staff at GDOT TMC
 - D7 at JOC
 - DTOP/RTOP “boots on the ground”
 - Anticipated closures for POTUS at ~18:15
- 12:00 – 17:00 – Everything is awesome!!!!
- 17:00 – 17:15 – Hmm, something funny is happening on Northside... but who cares, everything is awesome!!

Timeline

- 17:15 – Northside (and soon after, Ivan Allen) is fully cleared, closed and shutdown for President's motorcade
 - One hour before it was supposed to happen
- 17:39 – Northside @ Ivan Allan closure remains, but police beginning allow passenger vehicles through 20 at a time
- 17:53 – Gate 1 shut down for POTUS. Northside peds being pushed away from MBS, and diverted to other gates

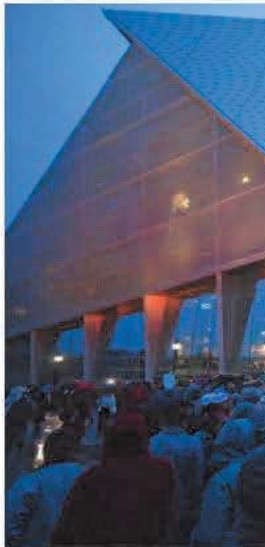
Time

SPORTS LA TIMES

Scene outside



By DAVID WHARTON



Fans wait outside Mercedes-Benz Stadium on Jan. 8. (Christian Petersen / Getty Images)

Ninety minutes before kickoff, the scene outside Mercedes-Benz Stadium was a sea of red and white.

Irate Alabama and Georgia fans wait hours in rain for national championship

Updated Jan 9, 2018; Posted Jan 8, 2018



Fans wait in the rain to enter the Mercedes-Benz Stadium in Atlanta for the College Football Playoff national championship. (AP)

128 0 shares

By [Joseph Goodman](#), jgoodman@al.com

Thousands and thousands of soaking wet and irate Alabama and Georgia fans waited for up to two hours in the rain to enter Mercedes-Benz Stadium on Monday for the College Football Playoff National Championship game.

s on chaos

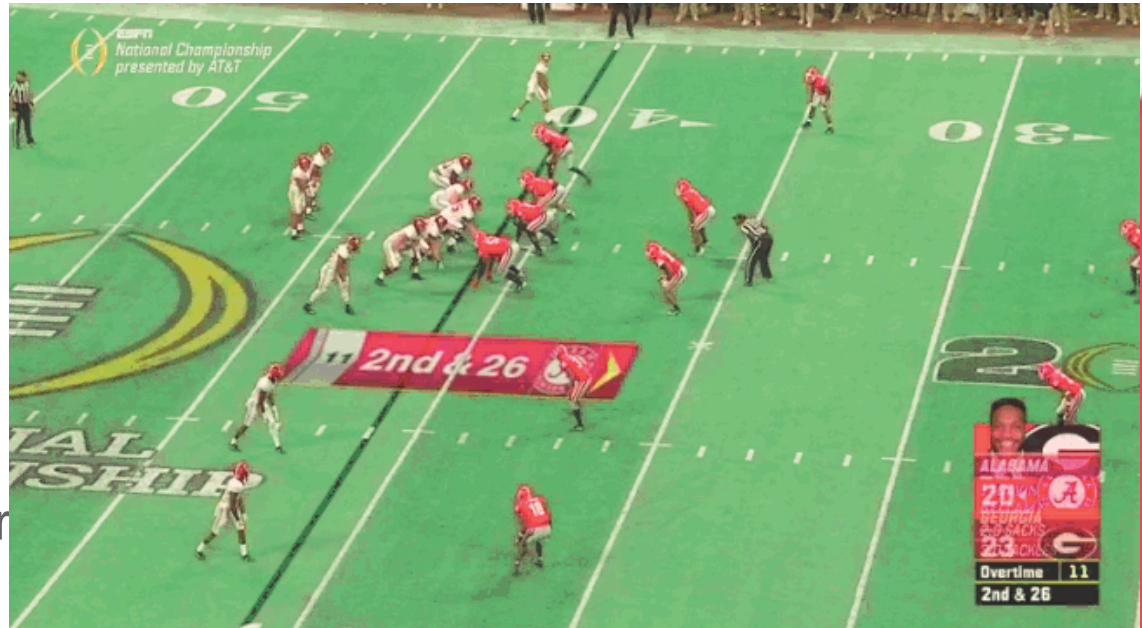


Timeline

- 18:06 – Northside and Ivan completely shutdown
- 18:08 – Interstate ramps start being closed
- 18:23 – POTUS on interstate
- 18:33 – POTUS exits interstate
- 18:36 – Interstate reopened
- 18:41 – Gate 1 reopened
- 18:48 – Northside reopened
- 18:48 – 19:33 – Insanity
- 19:33 – Visual confirmation of clear roads (45 min before kickoff)

Egress

- ~22:43 ...
- 00:10 – Game over...
- 00:40 – Champions ceremony
- 01:19 – MLK contraflow removed
- 01:40 – Officers pulled from street; Northside, Marietta, COP, Mitchell visually confirmed clear
- 02:00 – Last rest in green flush on Ivan Allen

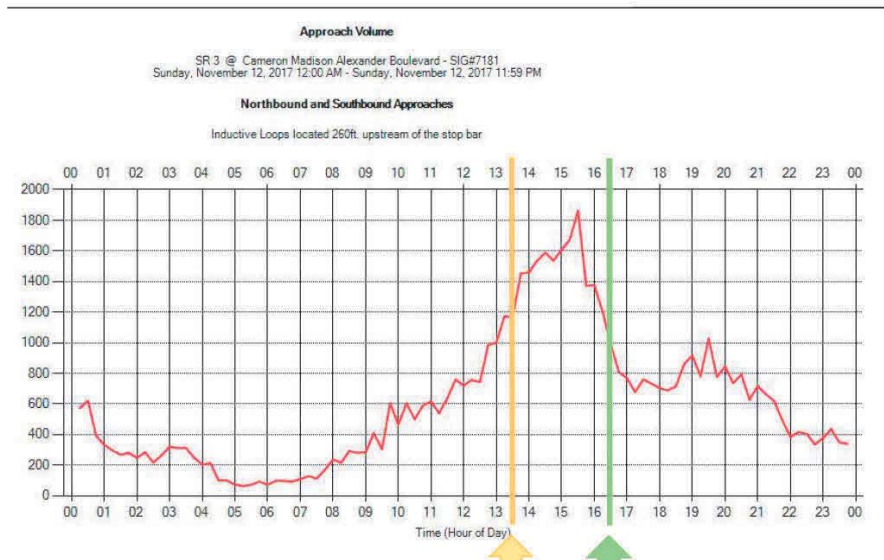


ATSPM Data

SR 3 @ Cameron Madison Alexander Blvd

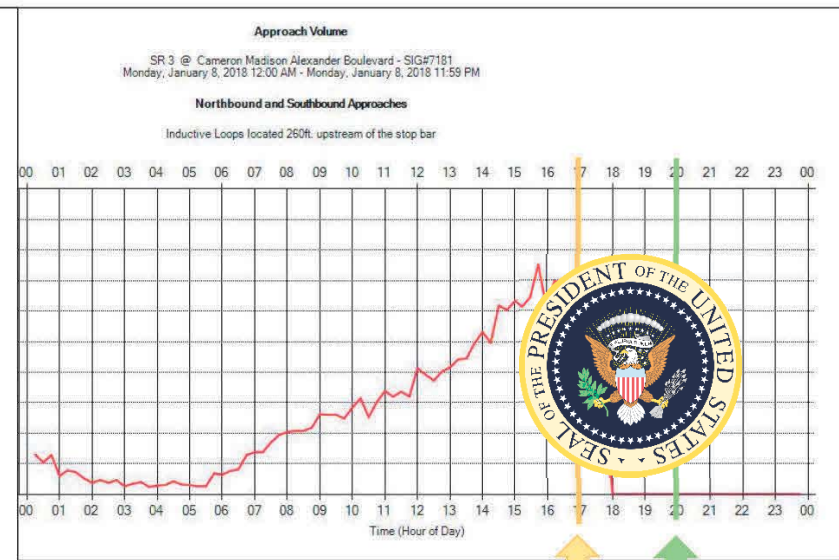
Cowboys vs. Falcons

College Football Championship



4:25 Start Time

Flow Rate = 1,200 vph

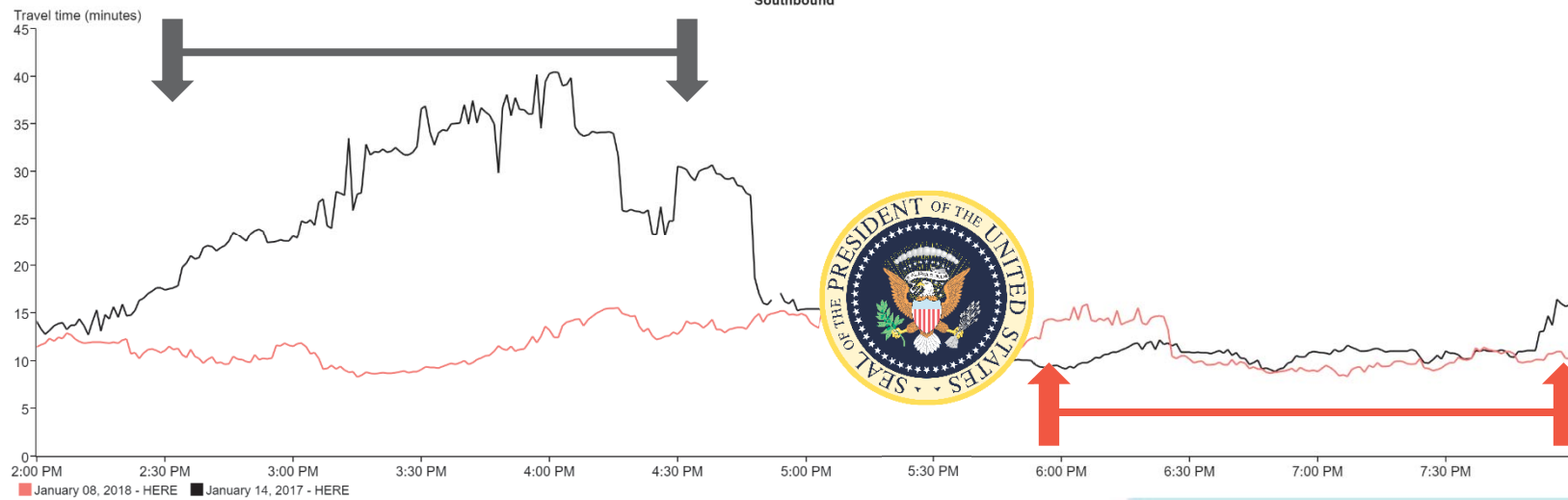
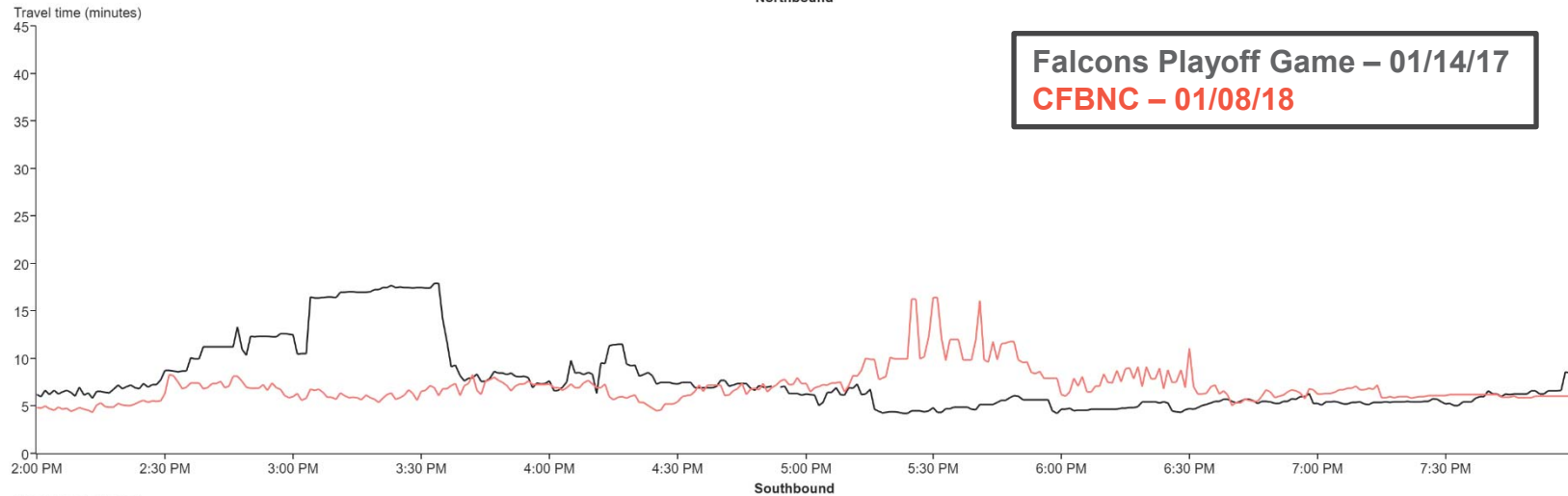


8:00 Start Time

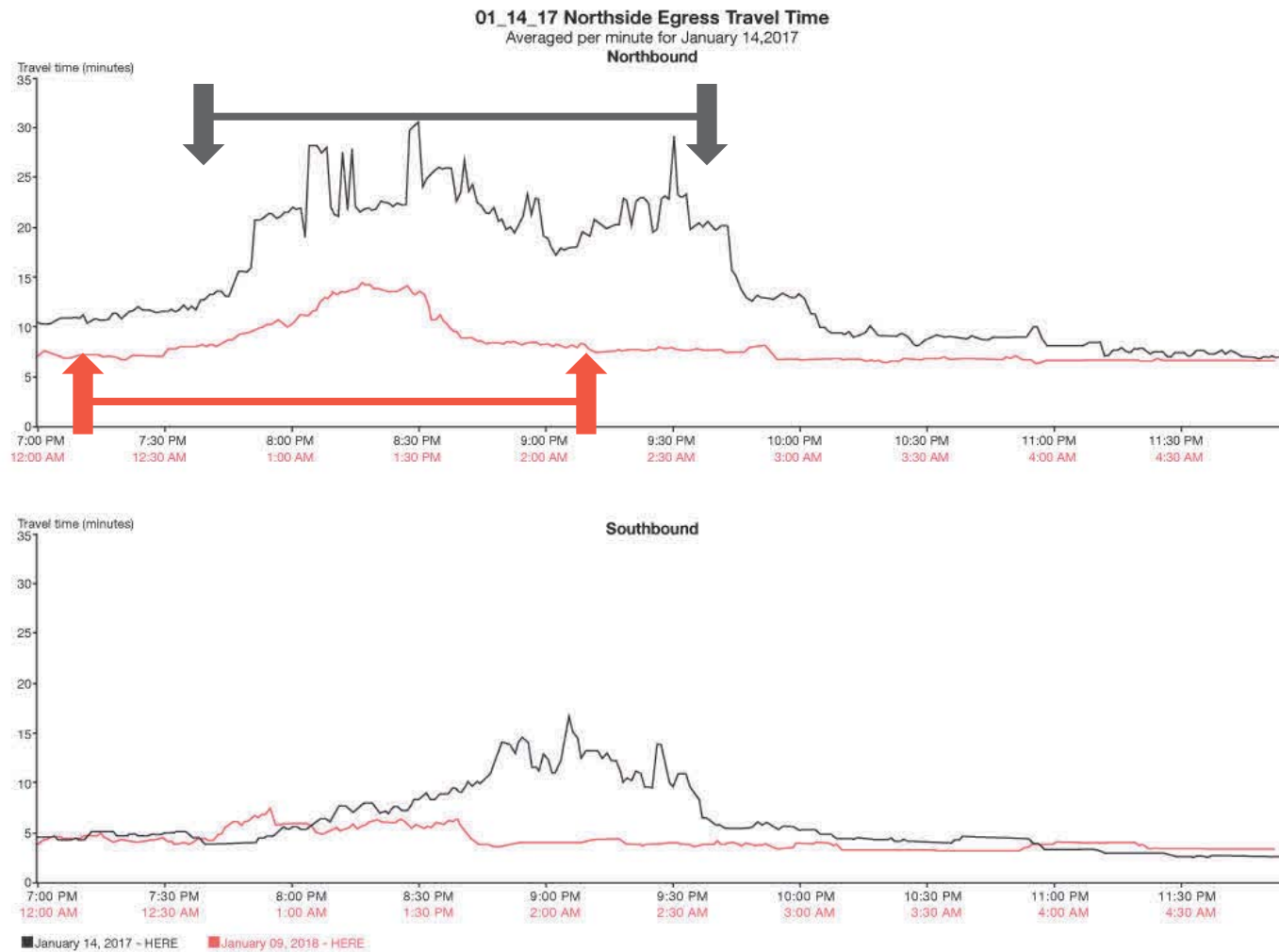
Flow Rate = 1,300 vph @ 15:00

RITIS Analysis

Comparison 4 Northside Ingress Travel Time
Averaged per minute for January 14, 2017 and January 08, 2018
Northbound

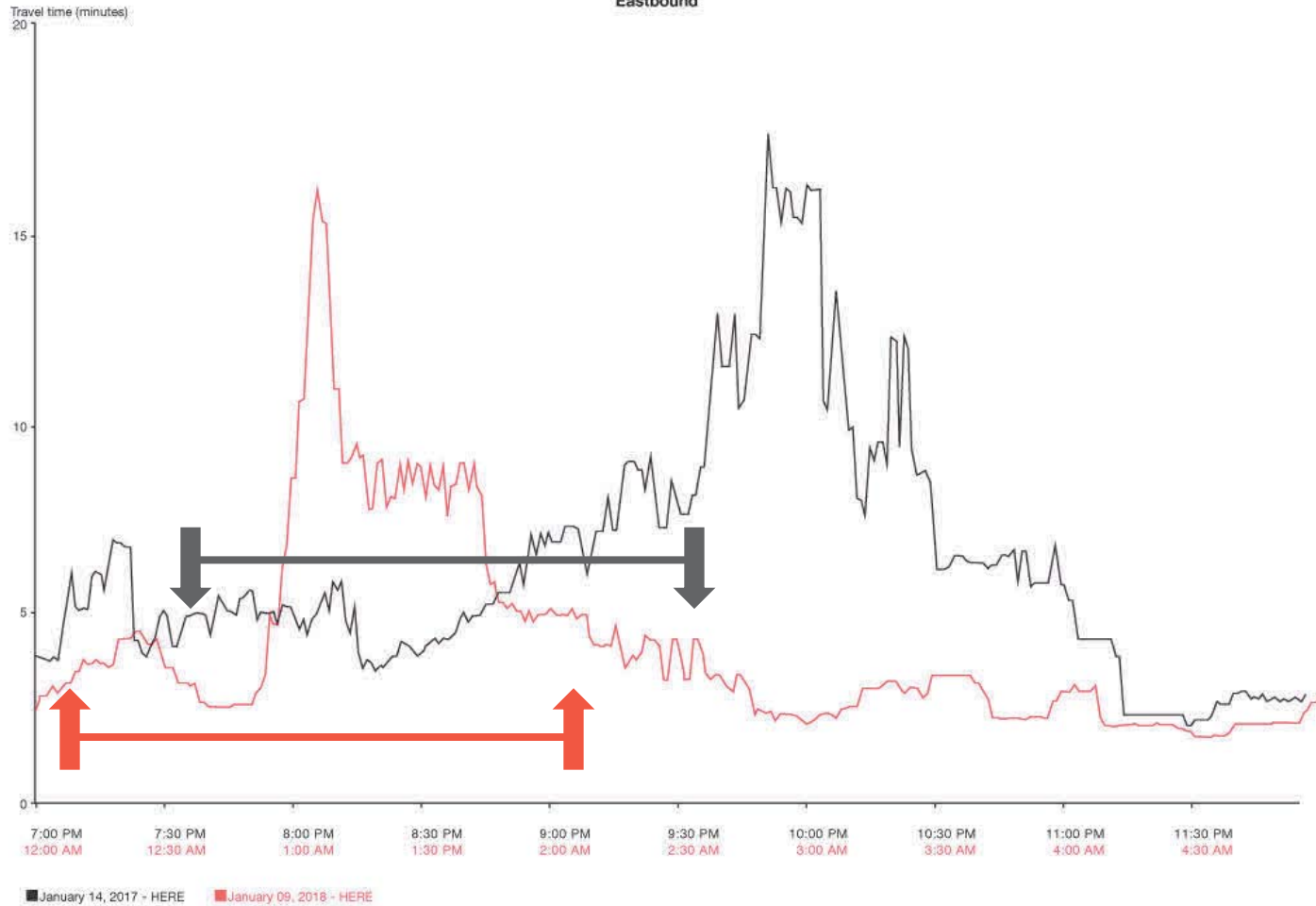


RITIS Analysis



RITIS Analysis

01_14_17 Ivan Allen Egress Travel Time
Averaged per minute for January 14, 2017
Eastbound



Super Bowl LIII



New Challenges

- New partnerships

- APD
- GSP
- SP+
- NFL

- Staffing

- GDOT TMC (1/25 – 2/4)
- Major downtown events (concerts, NFL Experience) from 1/31 – 2/4
- Super Bowl Sunday – 11 at TMC, 15 in field or on standby
- Daily operations calls

- Closures

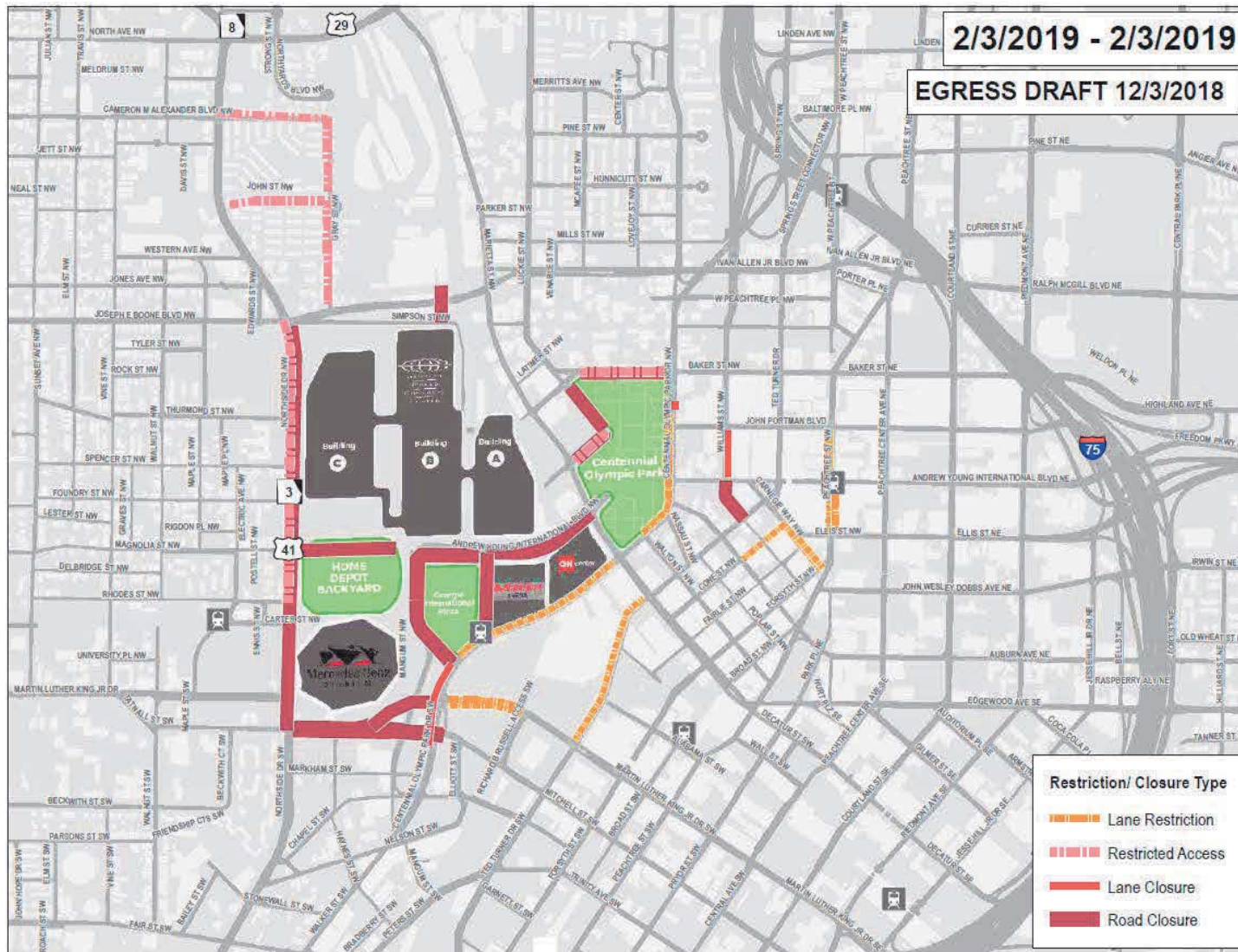
- Parking

- New timing plan development

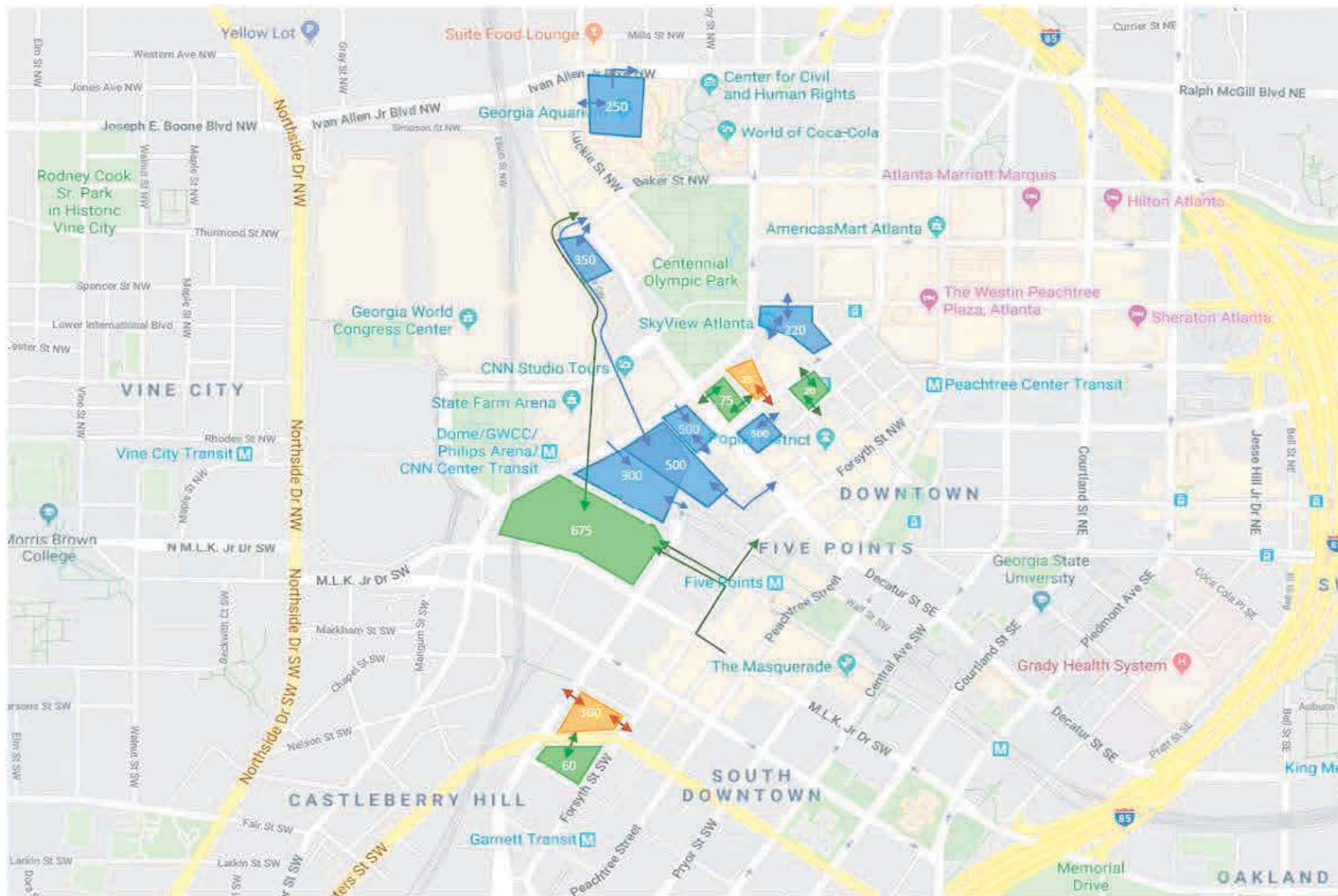
- Escorted movements, buses
- NFL transport routes



Closures

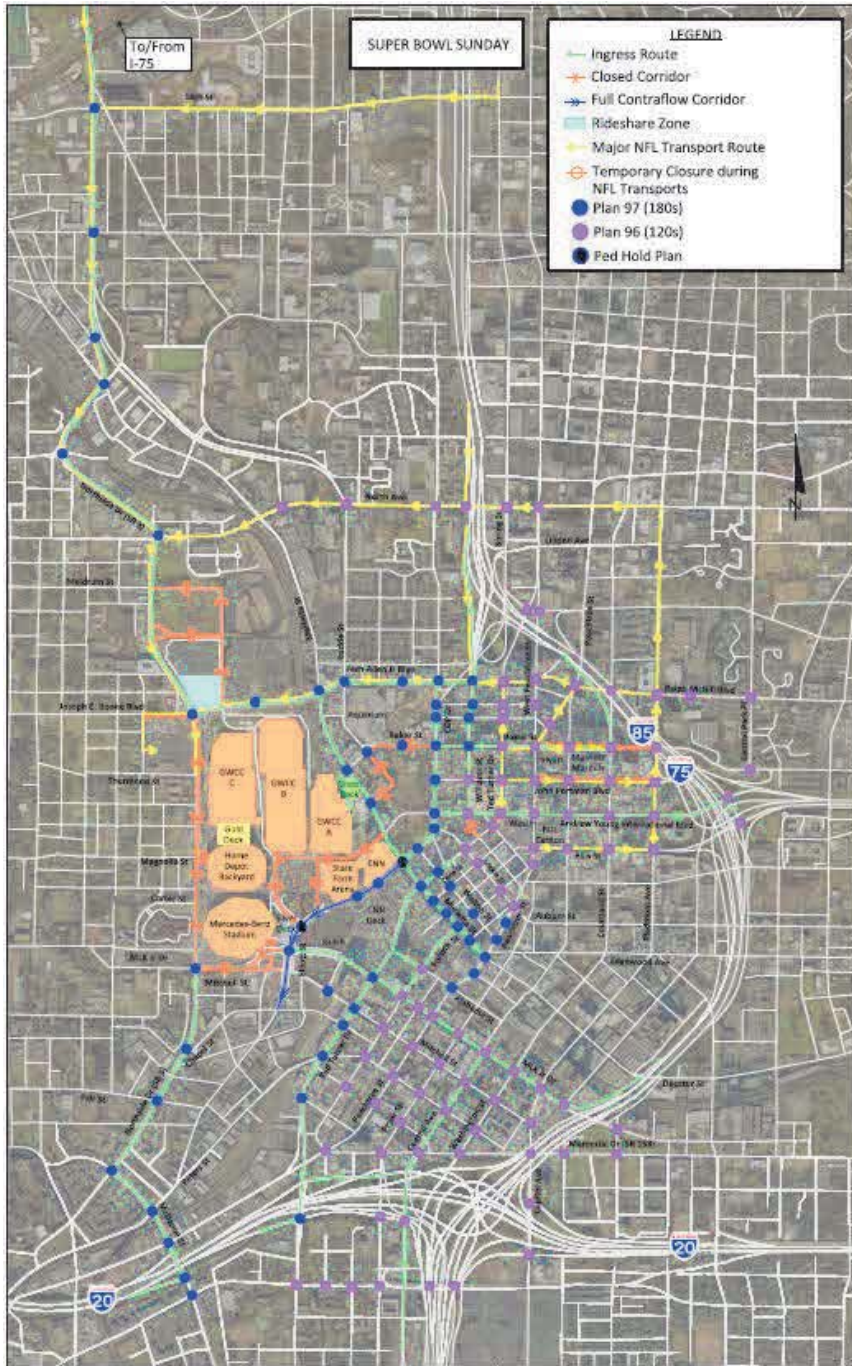


Parking



Super Bowl Sunday Spectator Parking

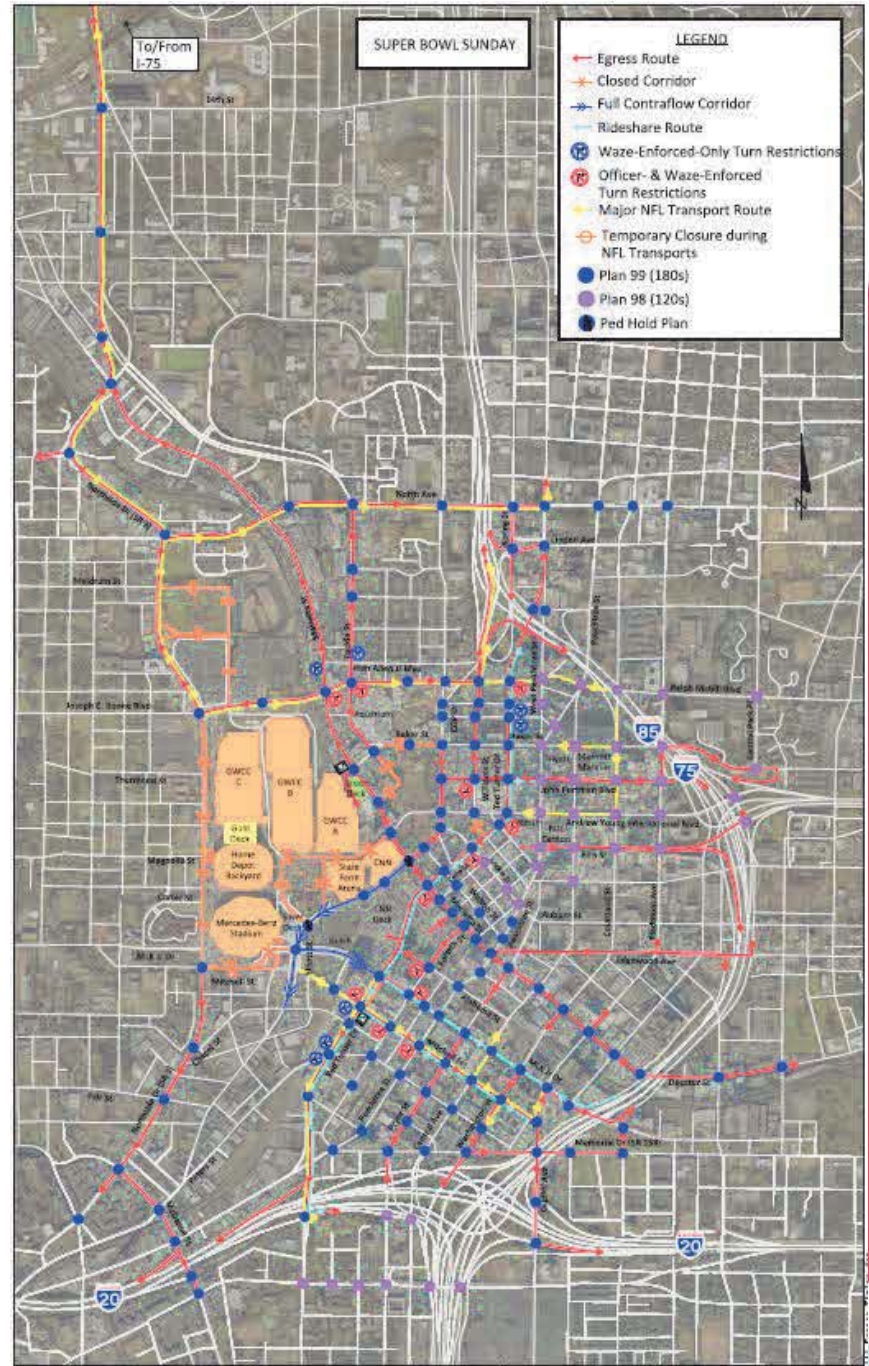
- 3220 Cars/SUVs
- 830 Buses/Vans
- 125 Limos



DOWNTOWN SPECIAL EVENTS PLAN
SUPER BOWL LIIII- INGRESS



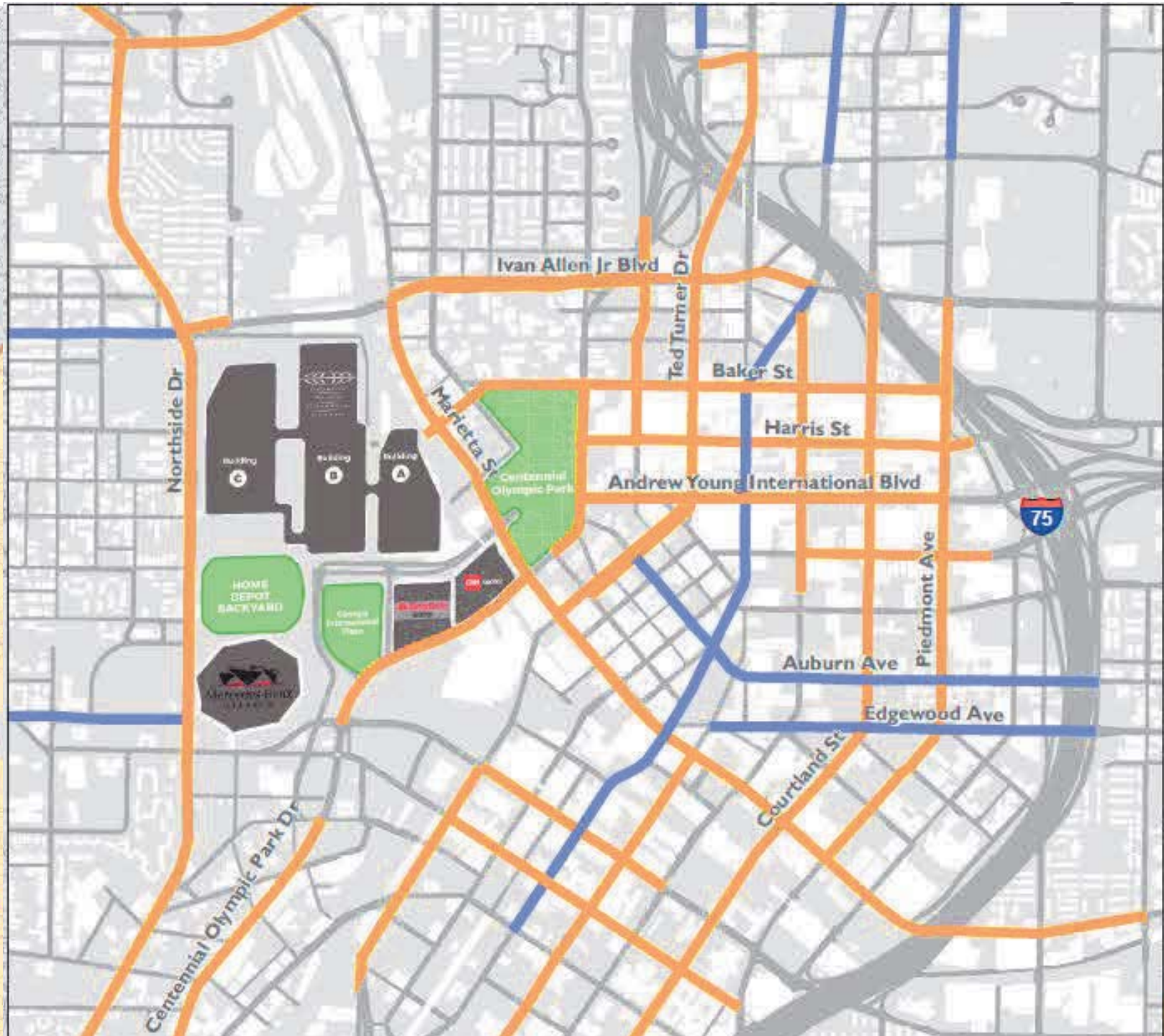
Kimley Horn



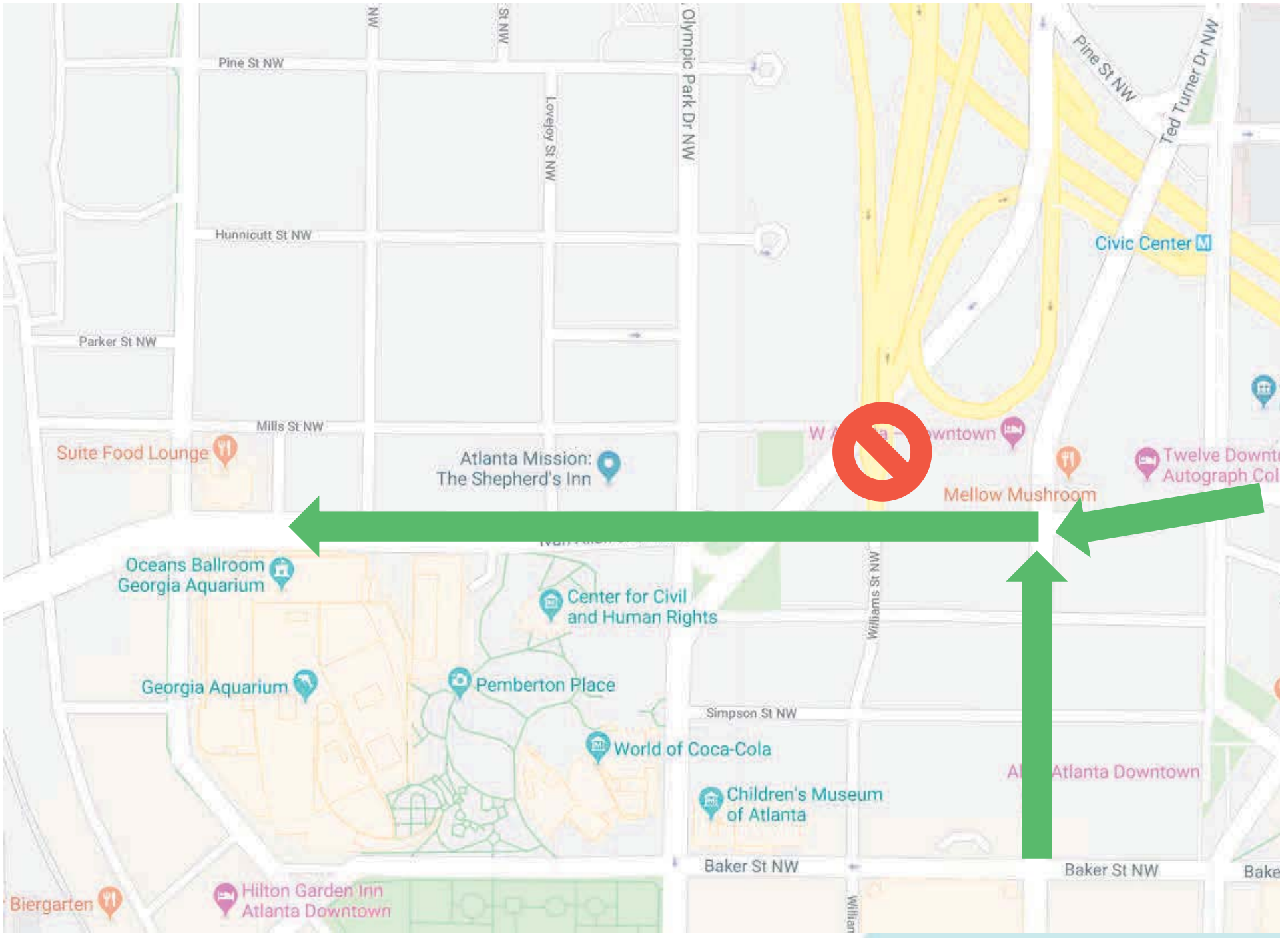
DOWNTOWN SPECIAL EVENTS PLAN
SUPER BOWL LIIII- EGRESS



Kimley Horn

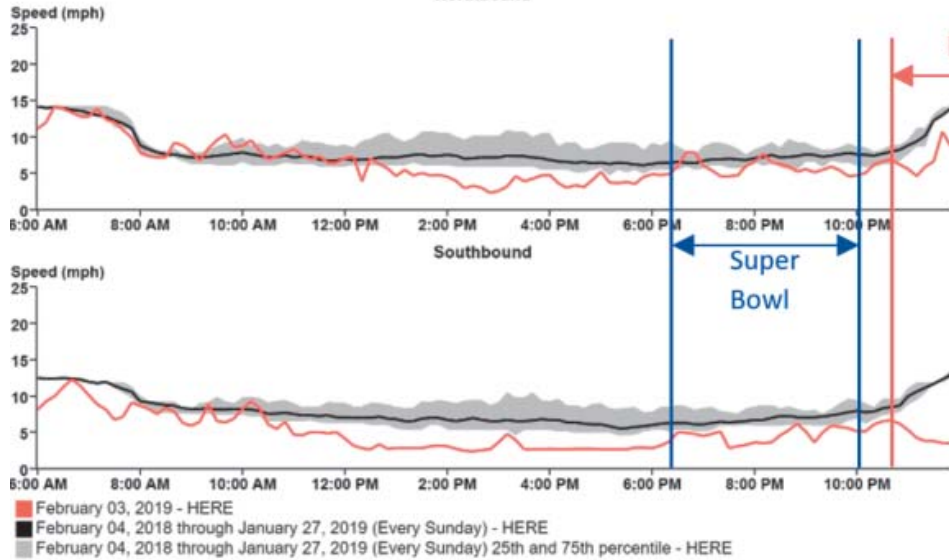






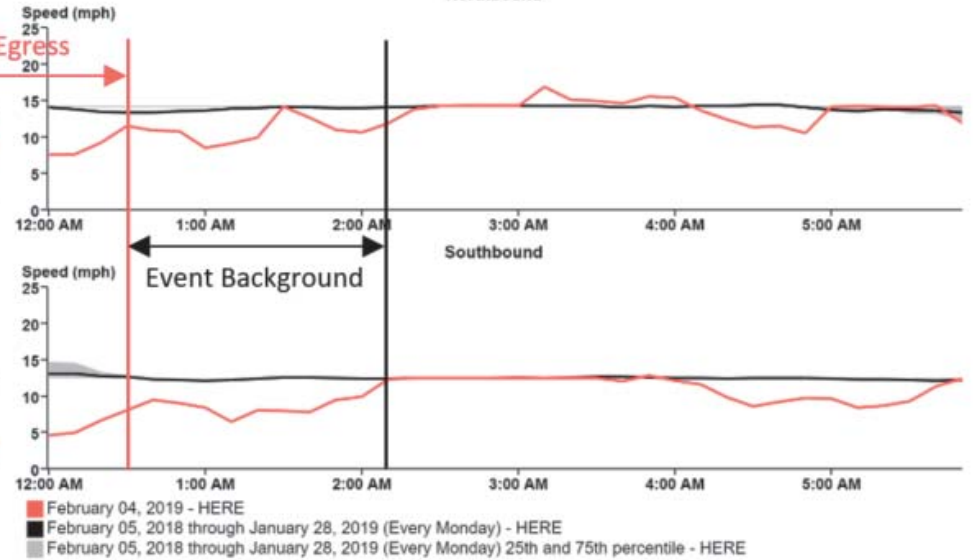
Marietta St NW

Averaged per ten minutes for February 04, 2018 through January 27, 2019 (Every Sunday) and February 03, 2019



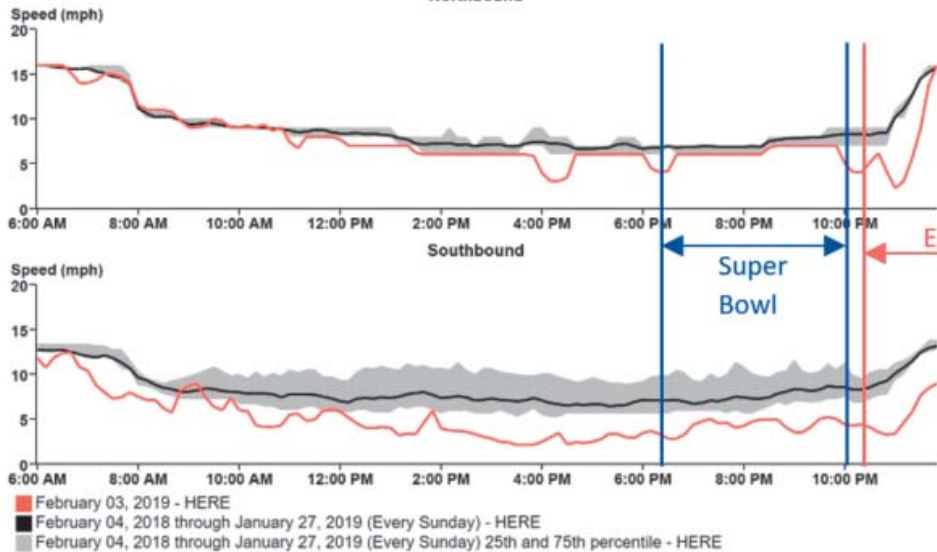
Marietta St NW

Averaged per ten minutes for February 05, 2018 through January 28, 2019 (Every Monday) and February 04, 2019



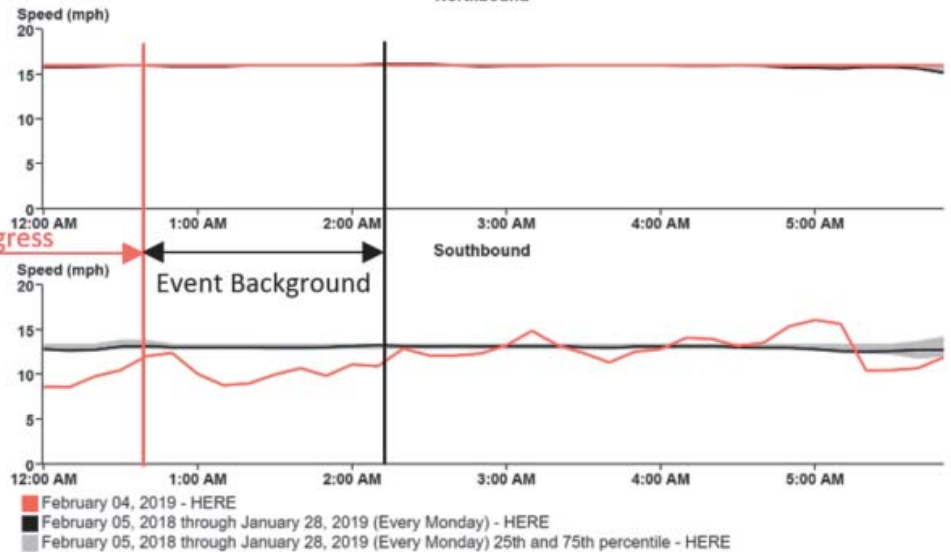
Centennial Olympic Park

Averaged per ten minutes for February 04, 2018 through January 27, 2019 (Every Sunday) and February 03, 2019



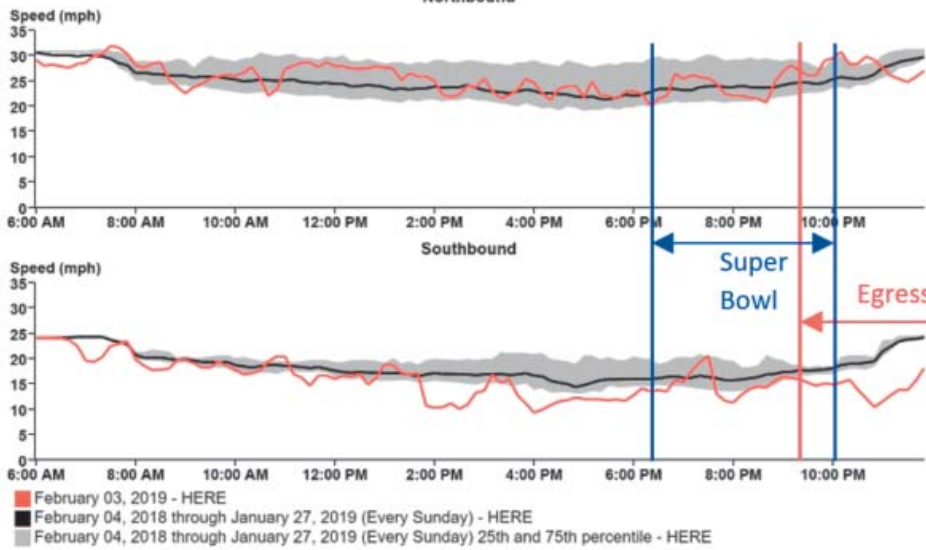
Centennial Olympic Park

Averaged per ten minutes for February 05, 2018 through January 28, 2019 (Every Monday) and February 04, 2019



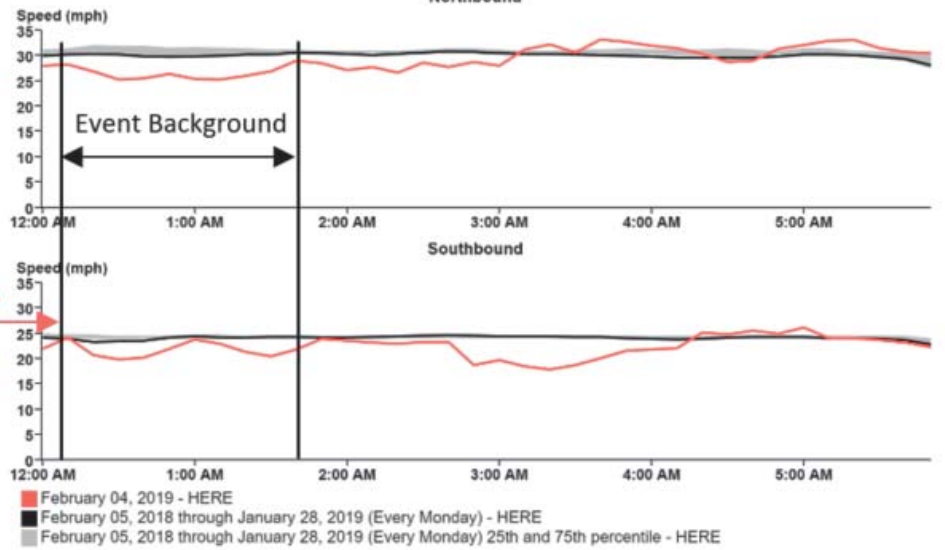
Northside Egress

Averaged per ten minutes for February 04, 2018 through January 27, 2019 (Every Sunday) and February 03, 2019



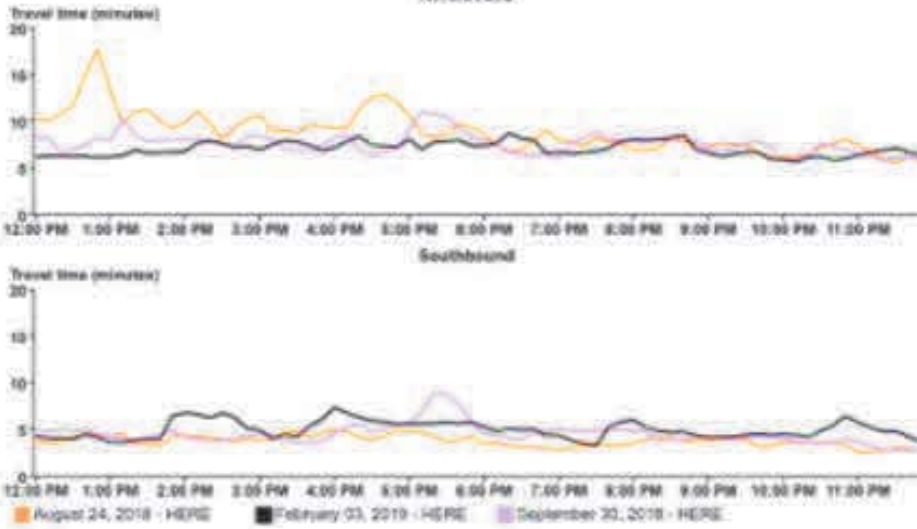
Northside Egress

Averaged per ten minutes for February 05, 2018 through January 28, 2019 (Every Monday) and February 04, 2019



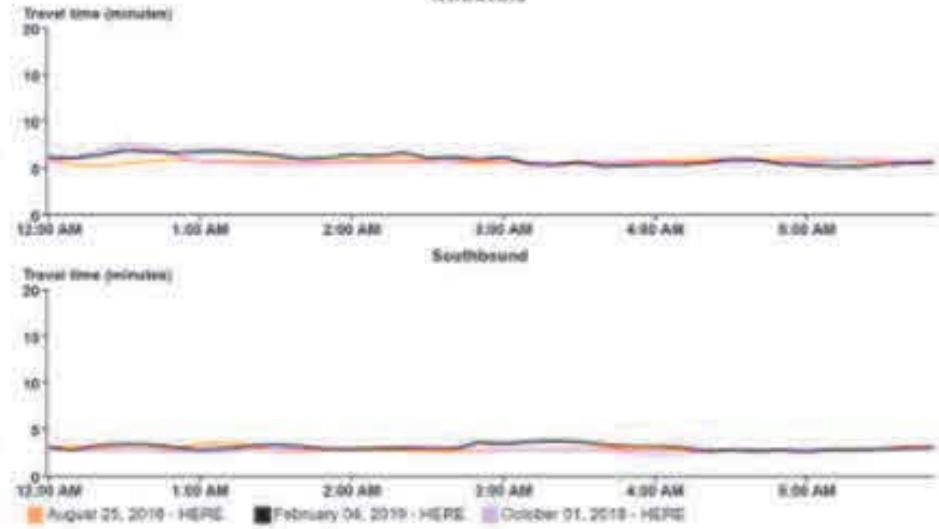
Northside Egress

Averaged per ten minutes for August 24, 2018, August 25, 2018, September 30, 2018, October 01, 2018, February 03, 2019, and February 04, 2019



Northside Egress

Averaged per ten minutes for August 24, 2018, August 25, 2018, September 30, 2018, October 01, 2018, February 03, 2019, and February 04, 2019



Questions?

