



I-85 Bridge Collapse & Reconstruction

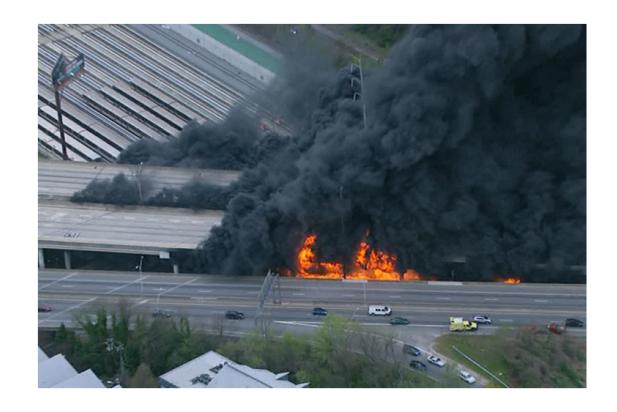
Andrew Heath, State Traffic Engineer, P.E. Georgia Department of Transportation





March 30, 2017

- What happened:
- Around 6:30 pm, a fire broke out underneath I-85 northbound.
 After burning for 40 minutes, a northbound span collapsed.







Travel Info
Video courtesy of GDO

The Event







The Event

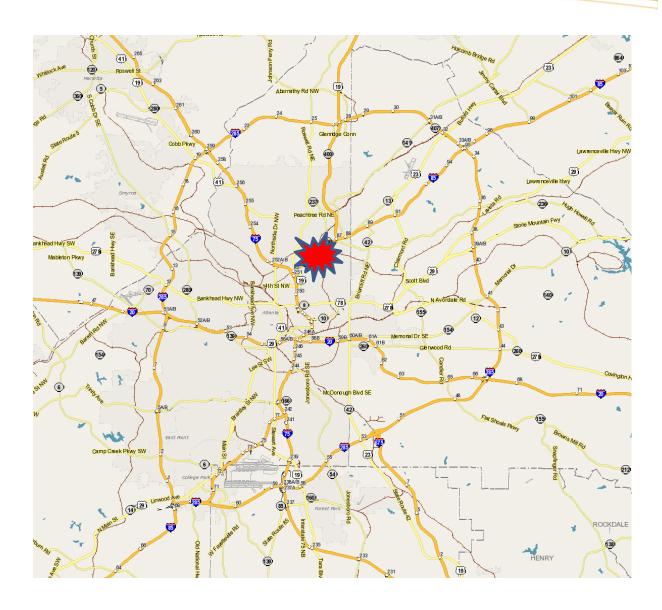








- 243,000 vehicles per day
- NB & SB
- 6 Spans/700'





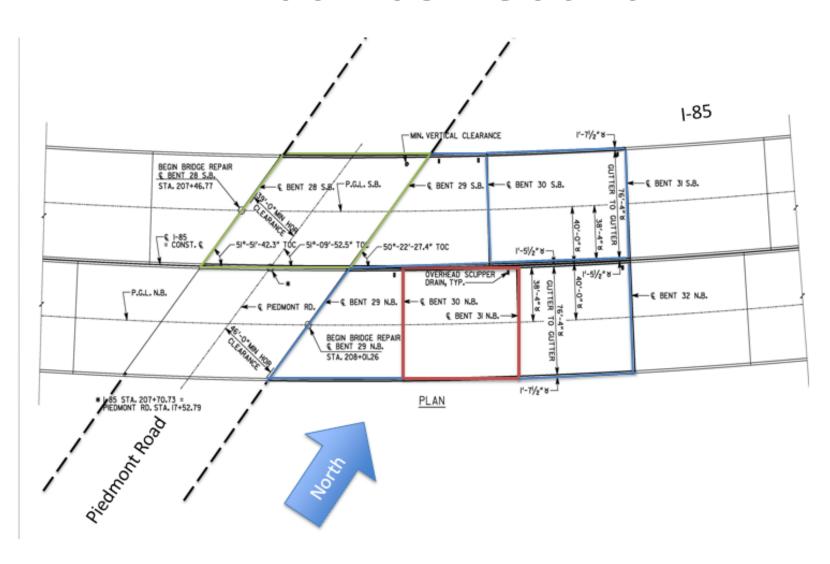








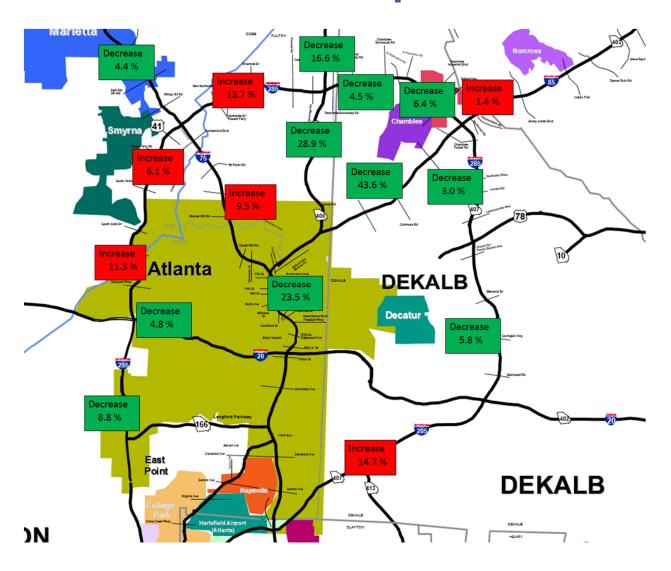
What Was Rebuilt







The Impact

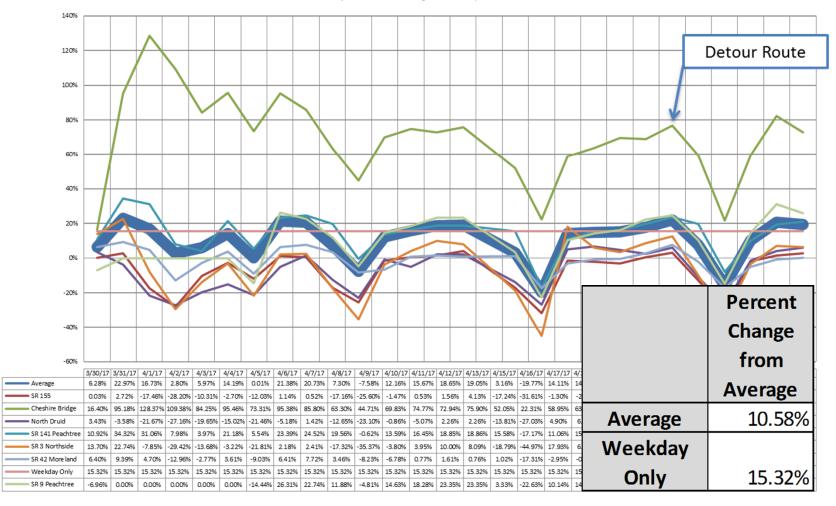






The Impact

Key Arterial Volume Changes - Post Collapse

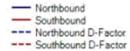


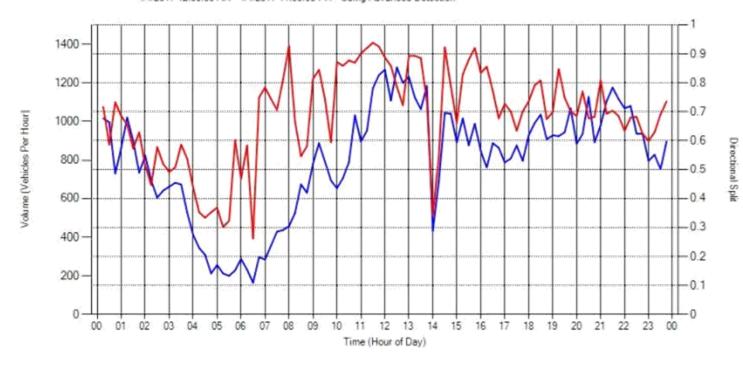




The Impact – Detour

Volume report for Cheshire Bridge Road @ Wellbourne Drive on the Northbound and Southbound approaches. 4/1/2017 12:00:00 AM - 4/1/2017 11:59:00 PM - Using Advanced Detection





Normal ADT: 20,998

Closure ADT: 43,324

106.3% Volume Increase





TMC Response

<u>Initially</u>

- Keeping cameras trained on fire. Passing info to management.
- Using message signs to route traffic away from fire area
- Dispatching HEROs to areas needing road and ramp closures
- Publishing info on social media, website and 511

Long Term

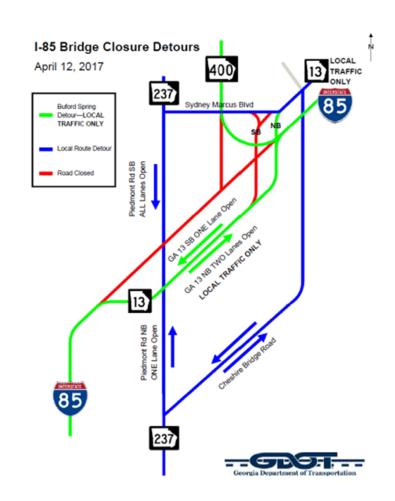
- Keeping motorists informed via message signs, social media and 511
- Reporting traffic shift data on a daily basis
- Participating in operational improvement discussions. Making recommendations
- Incident Management Staging Locations





The Response - Detours

I-85 DETOURS Atlanta Travel Advisory: I-85 is closed between I-75 and SR 400. Motorists are advised to use I-75, I-285 and I-20 until further notice. SR 400 SOUTHBOUND: EXIT AT SIDNEY MARCUS BLVD. OR TAKE I-85 NORTH **I-85 CLOSED BOTH DIRECTIONS** FROM I-75 TO SR 400. I-85 NORTHBOUND HOV LANE CLOSED I-85 NORTHBOUND DIVERTED TO BUFORD-SPRING CONNECTOR FOR LOCAL TRAVEL ONLY 20 **ATLANTA UPDATED 4-1-2017** -- GROT

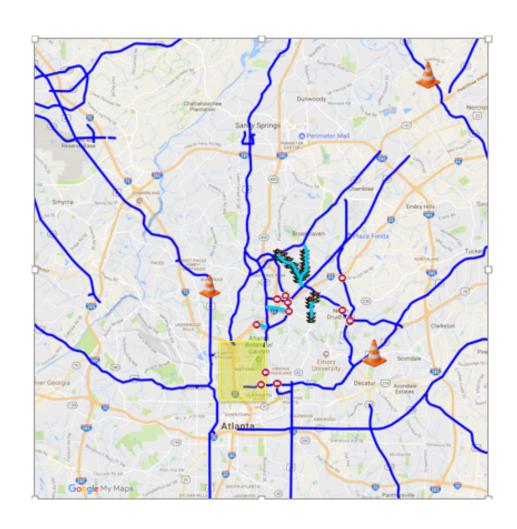






The Response – Active Management

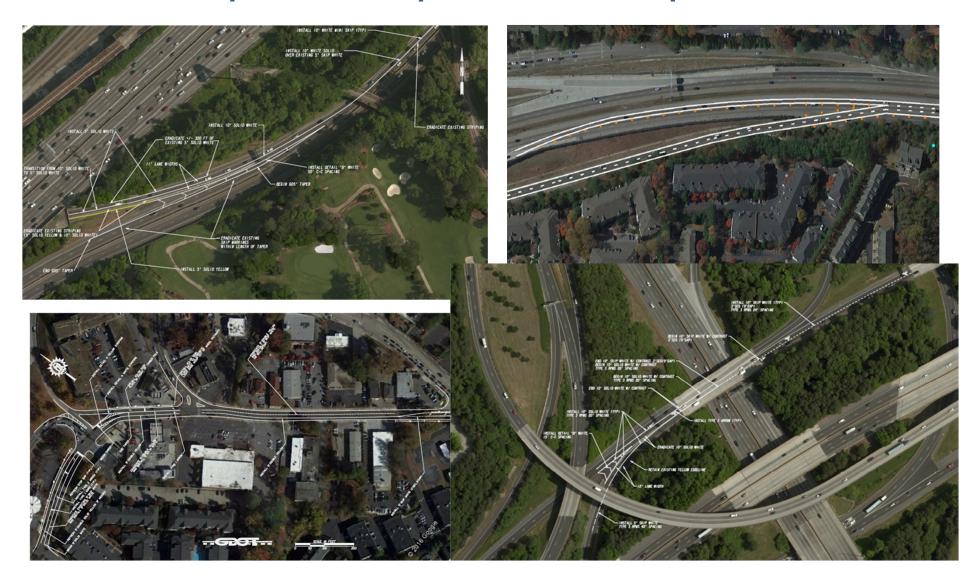
- 13 Traffic Signal Upgrades
- 6 addtl miles of active management
- CCTV Deployment
- 10 Targeted Locations for 'Don't Block the Box'
- APD Partnership







The Response – Operational Improvements







Traveler Information

	Calls	Live Oper Transfer	Transit info	Peak Day calls	Peak calls in 1 hour	Duration of all calls, hrs
Jan	67214	8126	124	6632	831	1580:39:23
Feb	48195	6157	125	4720	643	1058:14:56
Mar	81880	9762	208	11693	1319	2057:03:22
Apr	86377	12011	216	7222	977	2332:10:28





Traveler Information

Total 511 App Downloads

Prior to Collapse:

• Android: 80,800

• iPhone: 171,300

After Collapse:*

Android: 83,300

• iPhone: 175,600

Website Usage

Week prior to collapse: 28,000

visitors

1st week after collapse: 83,000

2nd week after collapse: 79,500

3rd week after collapse: 56,000

4th week after collapse: 52,100

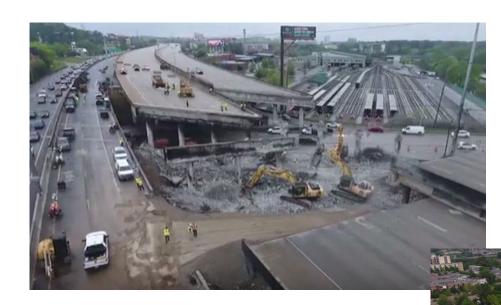
5th week after collapse: 39,600

*6800 new downloads





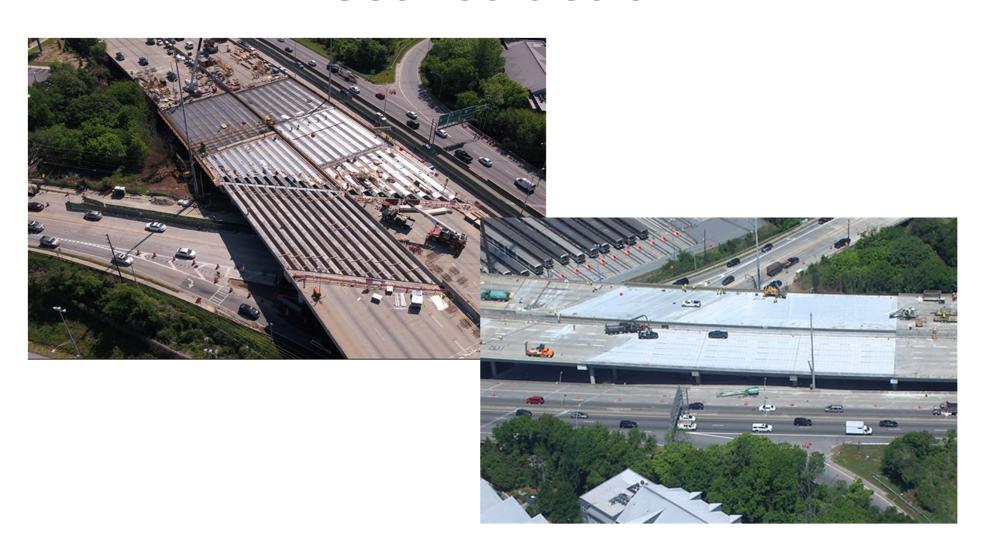
Reconstruction







Reconstruction







Lessons Learned

It's **ALL** about:

- Relationships
- Communication





Questions?