



## I-85 Bridge Rebuild Media Status Update Transcript

April 4, 2017; 10-10:45 a.m.

### Georgia DOT Commissioner, Russell R. McMurry, P.E.

- Thank you all for being here and for the great work in messaging to the public. Your coverage has been exceptional.
- Thank you for your patience with us in regards to doing interviews. It was critically important that we were laser-focused during the first 48 hours.
- We hope this format will be beneficial, as we want to share with you all of the information we have thus far and also provide expectations going forward.
- We must always start by thanking the first responders to this catastrophic event - such as GSP (Georgia State Patrol) and APD (Atlanta Police Department). Col. Mark McDonough, Commissioner of DPS, is here with us today. Thank you for saving lives; the heroism of the Atlanta Fire Department is unmatched.
- Thanks to all of our partners starting with the leadership from Governor Deal, Sec. Chao of the U.S. Department of Transportation, the FHWA (Federal Highway Administration), GRTA (Georgia Regional Transportation Authority) and MARTA (Metropolitan Atlanta Rapid Transit Authority).
- Above all, thank you to the citizens of Georgia for their patience, kindness and support.
- And for the dedication of the employees of GDOT – working around the clock.
  - From first notice, notification went immediately to bridge inspection to get to the scene, even before the collapse.
  - Immediately pulled a team together at the Ops Center at TMC and began triage.
  - Bridge design began reviewing original plans.
  - Began communication and coordination with all our partners.
    - FHWA
    - GEMA/HS (Georgia Emergency Management & Homeland Security Agency)
    - DPS (Georgia Department of Public Safety)
    - APD
    - COA (City of Atlanta) Traffic
    - GRTA
    - MARTA
  - And we haven't stopped.
  - More details to come from Meg and Marc and Andrew.
- Our support from U.S. DOT and FHWA has been exceptional.
- I personally spoke with Sec. Chao on Friday and with her top staff on Sunday.
- I would like to show you a normal federal project flow chart of activities. (flow charts on easels)
- A very long process has been shortened to 10 items and eight are complete; the last two are up to us.
- You will hear more about contracting from Marc.
- Let me address the storage of the HDPE (high-density polyethylene) conduit.
  - The materials belonged to GDOT. It is HDPE (high-density polyethylene) and fiberglass conduit.
  - This material came from a project to install Advanced Traffic Management Systems, cameras, CMS and ramp meters along SR 400 from I-85 to I-285.
  - The project was bid in July 2007.
  - The contractor was TDC Systems Integration, Inc., in Smyrna, Ga.

- The contractor was placed in default and work stopped in April 2008.
- GDOT had already paid for the materials and therefore took possession of them. They were placed at the site at Sidney Marcus and Buford Highway around December 2009.
- When the SR 400 to I-85 ramps project began, the materials were moved to the Piedmont Road location in May 2011.
- Here's what we plan to do:
  - This is an active investigation. We have and continue to fully cooperate with the fire investigation by local officials. We are not in a position to comment on certain aspects, but we can reiterate what we have already said.
    - In an effort to save taxpayer dollars, GDOT chose to store the material in hopes it could be used on another job.
    - The material was stored on state property in a secured area with a locked gate.
    - The area was breached by an individual or individuals who illegally trespassed on private, state-owned property, with devastating outcome.
    - We are told by fire officials and media reports that the blaze was deliberately set and it subsequently spread to the HDPE.
    - Naturally we continue to cooperate fully with investigators on this case; we look forward to the final report.
- Throughout this incident, we've been in communication with the NTSB (National Transportation Safety Board).
- Today, I signed the necessary documentation so that GDOT will become a party to and fully participate in an NTSB investigation of this incident.
- Yesterday, I spoke directly to Commissioner of Insurance and Safety Fire Commissioner Ralph Hudgens and State Fire Marshall Dwayne Garris.
- I am requesting their assistance in conducting a joint review with GDOT of our storage procedures, practices and policies, particularly those regarding storage of materials in, around and under bridge structures or other transportation infrastructure.
- We would expect that the review be statewide and provide recommendations regarding best practices, procedures and policy review and recommendations that ensure adequate storage and handling of all materials.
- Commissioner Hudgens was supportive and today I've sent that formal request.
- We hope through the joint review and the NTSB investigation that Georgia and the nation can benefit from the findings.
- Our full focus and attention is getting I-85 open ASAP.
- I would like Meg Pirkle to share with you now what we've done with inspection, engineering and design to accelerate getting I-85 open.

**Chief Engineer, Meg Pirkle, P.E.**

- Thank you, Russell.
- Let me begin by talking about the bridges that we will be replacing. The original bridges were built in 1984. The last inspection was completed August 23, 2015. The bridges were determined to be in overall good condition with normal wear consistent for the type and age of structure.
- When notified of the collapse, our Bridge Design and Bridge Inspection teams mobilized immediately, and both have worked around the clock since Thursday night.
- We had bridge inspectors on site Thursday night and overnight, ready to begin inspections as soon as the fire was extinguished. On Friday morning, we had eight bridge inspectors on site performing inspections and relaying information back to our construction and design engineers.

- We still have bridge inspections crews working at the site to review areas uncovered as debris removal continues. We are optimistic that we will not find any additional critical damage; however, we still have one span to remove before completing the inspections.
- The State Bridge Engineer, Bill Duvall, and the GDOT structural design engineers began working Thursday night as well, gathering the design plans for the original bridge, evaluating a strategy for redesign, and determining the critical path items that needed to be accomplished first in the redesign.
- It was immediately evident that beam fabrication of the 61 pre-stressed beams was going to be a critical item in the construction of the new bridge. Last Thursday night we reached out to the beam fabricator, who had knowledge of the original bridge beams.
- The original design used a different beam type and shape than the standard beams that we use now. We could have rebuilt this original design, but the time for beam fabrication of these non-standard beams would have been lengthy.
- In an effort to ensure expeditious construction of the new bridges, the State Bridge Engineer determined that redesigning the bridges using existing span lengths and beam types commonly used today would allow the construction to begin and progress quickly and efficiently.
- By Friday night, GDOT had transmitted the redesigned beam plans to the contractor and beam fabricator to initiate fabrication.
- The beam plans Friday night were just the first element completed in this redesign. GDOT had about 15-20 bridge design engineers who worked throughout the weekend and developed plans in three days for the entire bridge replacement. They were in continuous communication with the field engineers on site who were identifying areas and issues that needed to be worked out. At interim points throughout the weekend they provided construction staff and the contractor design plans for elements of the bridges as they were completed: reinforcing steel, cross-frames and bearings – all things that need to be prefabricated.
- The final construction plans for the entire project were transmitted to the contractor at midnight Sunday night. Completion of these plans in just three days is a huge milestone. We have a very talented staff of structural engineers and I'm so pleased with the progress made. Our bridge engineers will continue to work with the contractor and construction throughout the entire project – reviewing shop drawings and responding to questions throughout.
- The final design incorporates the use of 24-hour accelerated curing concrete throughout the project (very expensive – not typically used in everything) to expedite the construction progress.
- Another effort to expedite the progress is that we will be retrofitting the columns – we will be cutting off the columns about nine feet below the original caps, peeling off all of the old concrete cover material, and building new columns around the existing steel. For some of the more damaged columns, we will be digging down into the foundations and rebuilding from that level.
- Our engineering staff has had a lot of discussion about the viability of using a pre-engineered temporary structure to carry traffic during construction. The size and complexity of this site is very challenging and does not lend itself to a temporary structure for several reasons:
  - At this point in the structures, at Piedmont Road, the bridges are in super-elevation, which I think I can most easily describe by saying the bridges are banked, like a NASCAR track. In addition, the bridge bent is skewed at this point, which is another reason a pre-engineered temporary structure would not fit well. The total span lengths to be bridged on I-85 range from 300 to 350 feet – another reason not conducive to the temporary structures.
  - Lastly, the contractor really needs to have the entire worksite open in order to progress with the reconstruction quickly and efficiently for the permanent solution. The use of temporary structure would delay getting this project completed as quickly as possible. Given the volume of traffic that relies on this interstate highway, we want to complete the project as soon as possible and get the road permanently open.

- I'll now turn it over to Director of Construction Marc Mastronardi to discuss construction progress and plans moving forward.

#### **Director of Construction, Marc Mastronardi, P.E.**

- Update since Thursday – hot spots on Friday a.m., needed to assist AFD (Atlanta Fire Department) by breaking deck to reach those spots, coordination with AFD and NTSB to preserve evidence. Focus was on Piedmont, then the balance of demolition. We are approximately 80-85 percent complete with demolition per the contractor's schedule. We expect it will be complete sometime Thursday.
- With the Governor's declaration of a state of emergency, we were able to employ Federal Aid Highway Emergency Relief guidelines. This allows for a negotiated contract to be entered if it is critical to restore essential travel in an expedited manner.
- The Department pursued this very direction with support of our FHWA partners as we zeroed in on the extent of the damage that had occurred to both directions of I-85.
- The contracting approach we have entered into for the repairs allowed for concurrent development of plans, preparation by the contractor as well as essential material suppliers such as those who fabricate beams and reinforce steel.
- Had a traditional design, advertise and then bid approach been employed, we are certain it would prolong the impacts to all involved. The nature of the FHWA's emergency relief is that it is streamlined, such that permit for the replacement of this structure in a footprint generally consistent with what had been there, does not require lengthy review.
- We selected C.W. Matthews Contracting Company based upon their availability, resources and expertise. If you recall, they provided a similar response for us in 2001 when a tanker fire damaged I-285 over SR 400. They received high marks for the efforts in that repair. A consideration in our selection is the ability to not have this response impact any of their other work contracted with GDOT.
- We have included techniques to speed up the completion. For example, prefabricated steel diaphragms; employing accelerated concrete mix designs that utilize 24-hour strength development; addressing permitting needs to be able to haul beams 24 hours/day, as opposed to overnight only. You can expect to see beams arriving mid-month and all beams arriving by month's end.
- We understand there is a great desire to know cost and time estimates. For time, we expect the work to be completed in roughly 10 weeks, or June 15. We expect the contractor to complete their estimate by week's end and for us to reach a negotiated agreement approved by our FHWA partners early next week. At that time we can share the details with you all.
- Incentive – at the governor's urging we are going to incentivize the completion of this work, which is not uncommon for high-priority projects needing early completion, such as this. The structure of that incentive is to examine the impacts to the nearly 250,000 road users.
- With that, we will select a date that we believe is aggressive but attainable and offer a bonus for earlier completion. We will also then include an opportunity for additional daily incentives for each day sooner than that. We are completing that structure now.

#### **State Traffic Operations Engineer, Andrew Heath, P.E.**

- Georgia DOT Traffic Operations staff operates the Statewide TMC (Transportation Management Center) on a 24/7 basis. At this facility, full-time operators utilize over 1,000 cameras, 100 changeable message signs, and state-of-art communication equipment to provide real-time traffic conditions and traveler information to the citizens of

Georgia. Staff at the TMC utilize this technology to dispatch and communicate with our HERO operators who continuously patrol metro Atlanta interstates to provide emergency response and motorist assistance. The facility also serves as our statewide 511 center. Operators are always available to provide live traffic information to any motorist in Georgia by simply dialing 511.

- The TMC also houses GDOT's Regional Traffic Operations Program or RTOP - a team of over 30 signal engineers who utilize advanced signal software and real-time information to coordinate and adjust signal timing plans on key Metro Atlanta corridors. The RTOP team's sole focus is to maximize the efficiency of these corridors by best serving heavy traffic movements and progressing traffic as efficiently as possible. This team has been a key component to the Department's response to this event.
- The RTOP program covers over 1,500 signal within Metro Atlanta. These signals utilize advanced software and provide communication back to one central server at the TMC. The RTOP engineers are using this software to collect detailed performance metrics on vehicle volumes, signal performance, and efficiency. Through these tools, RTOP is able to make timing adjustments on a corridor-wide basis. These are tools that we did not have at our disposal as recently as 2010.
- Upon notification of this event, the TMC immediately activated as GDOT's Emergency Operations Center (EOC). HERO staff was dispatched to provide immediate traffic control, the RTOP program signal engineers began to make immediate adjustments to implement emergency timing plans, and 511 messaging and traveler information was placed on all of our public outlets. This level of activation has been in-place since Thursday, and we are anticipating a high level of activation throughout the duration of the re-build.
- HERO has maintained an increased presence and has adjusted routing based on the 85 closure. We are pre-staging HERO operators on I-285 and the Downtown Connector in an effort to reduce response times in the event of any incident. It is anticipated that these routes will continue to be traffic hotspots moving forward. Similarly, we have also fully adjusted routing for all HERO operators to best respond to needs of the traveling public.
- We have already seen a dramatic shift in traffic patterns throughout the Metro Atlanta region and must commend the traveling public for listening to alerts and adjusting their commutes. Traffic on I-85, SR 400, and the Downtown Connector have seen volume reductions between 40-70%. In comparison, I-285 and I-75 have seen volume increases in excess of 50-70%. It is apparent the detour messaging is being followed and adhered to.
- RTOP staff will continuously tweak signal timing plans to adjust to changing traffic conditions and detours. The primary focus for RTOP will continue to be the directly affected corridors within the vicinity of the I-85 closures. These routes include Piedmont, Peachtree, Cheshire Bridge, and Sidney Marcus. It is expected that these routes will continue to present traffic challenges throughout the duration of the rebuild. We have also implemented emergency timing plans on other key arterials that have already seen changing traffic conditions. These include Northside, Ponce De Leon, Memorial, Moreland, Clairmont and North Druid Hills. These emergency timing plans will give priority to the major traffic flow movements to help mitigate the impact of the 85 closure.
- Since Thursday, these new timing adjustments have been effective. Many of the routes listed, particularly those in the immediate vicinity of the closure, have seen traffic volumes in excess of double the typical volume. To put this into perspective, Cheshire Bridge Road typically carries approximately 18,000 vehicles per day. Since the event, Cheshire Bridge has been pushing over 40,000 vehicles per day. Similarly, Peachtree Road typically carries just under 40,000 vehicles per day. That has increased to over 55,000 vehicles per day since the closure.
- Although these approaches have been fully activated throughout Metro Atlanta, we anticipate traffic to continue to be challenging throughout the rebuild. As the Commissioner has repeatedly mentioned, we urge all commuters to consider other options such as MARTA and GRTA services to get to their destinations.

- We are pleased to have already re-opened sections of Buford-Spring Connector NB and Piedmont Road. Additionally, we are anticipating opening one lane of traffic on the Buford Spring Connector SB in the vicinity of the closure later this week.
- We urge patience for the traveling public. We ask that all motorists "Don't Block the Box." Please do not enter an intersection until it is apparent that you can subsequently leave on the far side. This is state law. Blocking an intersection reduces its efficiency. Similarly, we continue to ask motorists to "Drive Alert." We are continuing to expect traffic challenges, and crashes/incidents compound that effect. We ask that all drivers buckle up, put down their phone, and drive alert to arrive at their destinations safely.

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