HIGHWAY FACTORS AND RAILROAD GRADE CROSSING
GROUP CHAIRMAN'S FACTUAL REPORT
ERRATA

Valhalla, NY

DCA15MR006

(7 pages)

NATIONAL TRANSPORTATION SAFETY BOARD
OFFICE OF HIGHWAY SAFETY
AND
OFFICE OF RAILROAD, PIPELINE & HAZARDOUS MATERIALS INVESTIGATIONS
WASHINGTON, D.C.

HIGHWAY FACTORS AND RAILROAD GRADE CROSSING GROUP CHAIRMAN'S FACTUAL REPORT ERRATA

A. CRASH INFORMATION

Location:	Commerce Street Grade Crossing on the Metro-North Harlem Line, Valhalla, Westchester County, New York
Vehicle #1:	2011 Mercedes ML350
Vehicle #2:	Metro-North passenger train 659
Operator #2:	Metro-North Railroad
Date:	February 3, 2015
Time:	Approximately 06:28 p.m. EST
NTSB #:	**DCA15MR006**

B. HIGHWAY FACTORS AND RAILROAD GRADE CROSSING INVESTIGATIVE GROUP

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C. CRASH SUMMARY

For a summary of the crash, refer to the *Crash Summary Report* in the docket for this investigation.

D. PURPOSE OF ERRATA

The purpose of this errata is to ensure the accuracy of the factual content in the Highway Factors and Railroad Grade Crossing Factual Report. New factual information was received by the New York State Department of Transportation (NYSDOT) on June 9, 2017 and June 13, 2017 as it relates to post-crash actions taken by the NYSDOT after the crash.

The errata is organized so that the entire paragraph or sentence is taken from the Highway Factors and Railroad Grade Crossing Factual Report. The page number, paragraph number, and sentence are shown for reference. Deletions are shown with a strikethrough and additions are shown with an underline.

E. ERRATA

Page 19, 2nd and 3rd paragraphs.

Preemption #2 - Preemption #2 is activated by the railroad (See Figure 5) and provides green time for vehicles traveling eastbound on Commerce Street to clear the queue (cars). If the train preemption is activated the traffic signal will terminate the active green phase, run the corresponding yellow and red clearances, and turn green for vehicles traveling eastbound on Commerce Street only. This phase will remain green for a minimum of 2 ~~6~~ seconds and a maximum of 10 seconds. ~~Once a vehicle moves off of the loop detector (see **Figure 5**) located in the pavement of the eastbound lane of Commerce Street between the grade crossing and Taconic State Parkway, or it reaches its maximum time~~ Once the maximum of 10 seconds is reached the traffic signal will run the yellow and red clearance times and turn green on the Taconic State Parkway and cycle normally.

~~**Figure 5** illustrates the location of the loop detectors at the Commerce Street and Taconic State Parkway intersection.~~

Page 20, Delete Figure 5 and add a new Figure 5.

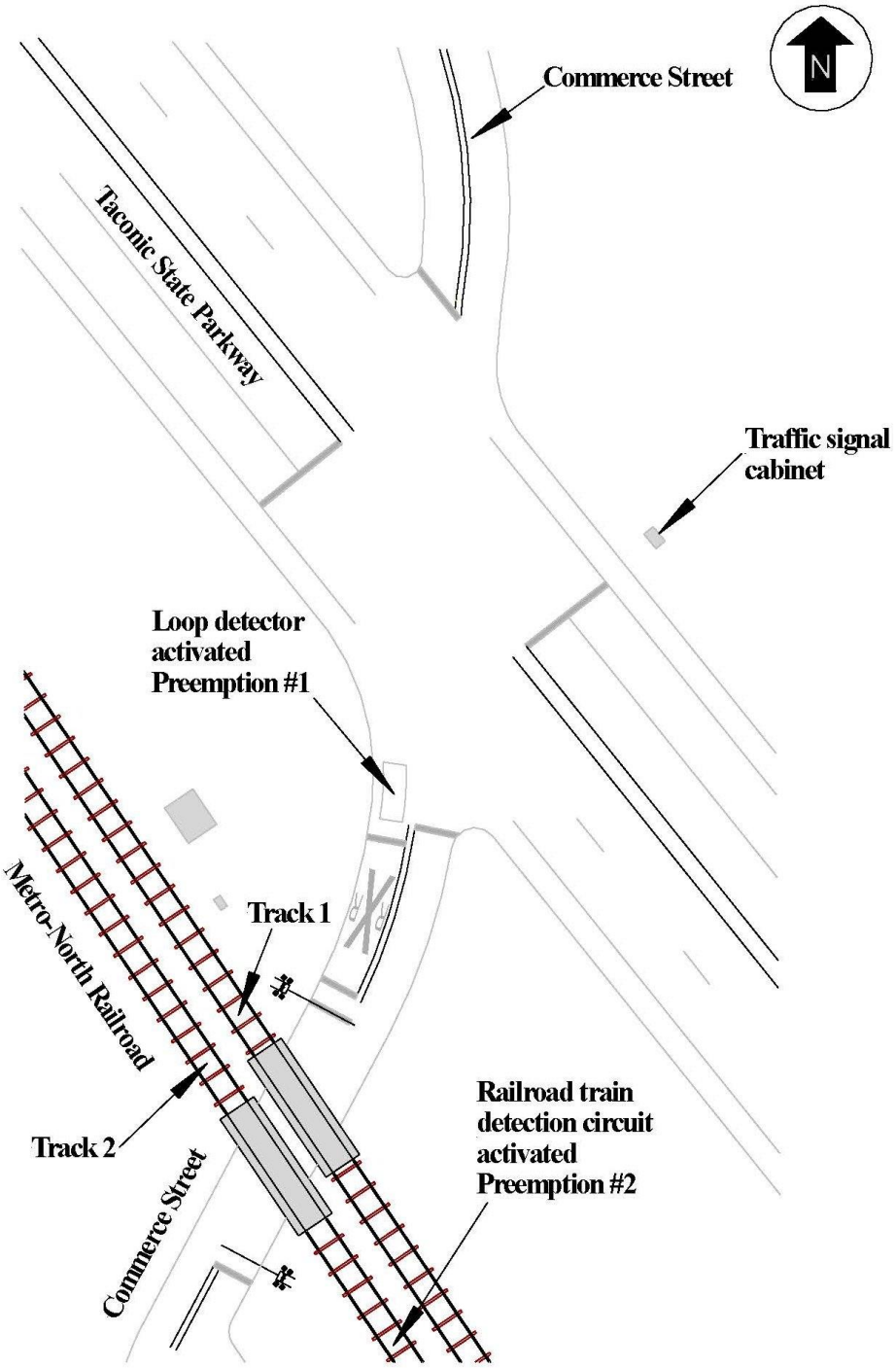

Figure 5 – Illustration showing the location of the loop detector for Preemption #1 and the railroad train detection circuit for Preemption #2 at the intersection of the Commerce Street grade crossing and Taconic State Parkway.

Page 22, 1st paragraph, add a new section entitled "9.2 Post-crash Actions taken by the New York State Department of Transportation (NYSDOT) on May 1, 2015".

9.2. Post-crash Actions taken by the New York State Department of Transportation (NYSDOT) on May 1, 2015

The NYSDOT informed NTSB investigators after the crash that on May 1, 2015, the NYSDOT adjusted the traffic signal preemption at the Commerce Street and Taconic State Parkway intersection to ensure railroad preemption is the highest priority and that successive preemptions cannot interrupt the railroad preemption (see Attachment 23 - Email from the New York State Department of Transportation (NYSDOT) to NTSB Investigators dated June 9, 2017 at 7:37 a.m.).

While adjusting the traffic signal preemption on May 1, 2015, the NYSDOT also adjusted the clearance time for vehicles traveling northwest on Commerce Street under Preemption #2. NYSDOT changed the clearance time from its range of 2 to 10 seconds, which was in effect at the time of the accident, to 29 seconds of clearance time, followed by 4 seconds of yellow (see Attachment 23 - Email from the New York State Department of Transportation (NYSDOT) to NTSB Investigators dated June 9, 2017 at 7:37 a.m.). This change, according to NYSDOT, was based on the "Guide for Determining Time Requirements for Traffic Signal Preemption at Highway-Rail Grade Crossings" contained in the *August 2007 Railroad-Highway Grade Crossing Handbook.* This guideline uses an intermediate semi-trailer, serving as a "worst-case vehicle" to assess the time it would take to move from a stopped position on the far side of the crossing, clear the tracks, and proceed through the intersection (see Attachment 24 - Email from the New York State Department of Transportation (NYSDOT) to NTSB Investigators dated June 9, 2017 at 11:34 a.m.).

The interconnection for the traffic signal preemption was installed on October 27, 2008, and at that time the NYDOT chose to use a range of 2 to 10 seconds as the clearance time at the grade crossing. Although guidance documents were available in the *August 2007 Railroad-Highway Grade Crossing Handbook*, it does not appear that NYSDOT used them to establish the clearance time. When questioned by NTSB investigators, NYSDOT staff could not explain why the preemption timing range was chosen at that time, nor could they identify what guidance, if any, was used when making that decision (see Attachment 25 - Email from the New York State Department of Transportation (NYSDOT) to NTSB Investigators dated June 12, 2017 at 12:27 p.m.).

The NYSDOT identified another traffic signal in Region 8 that is "similar" to the one at Taconic State Parkway and Commerce Street that has a maximum clearance time of 10 seconds. The traffic signal is located at River Road and Global Terminal in New Windsor, New York (see Attachment 25 - Email from the New York State Department of Transportation (NYSDOT) to NTSB Investigators dated June 12, 2017 at 12:27 p.m.). The NYSDOT is currently examining

whether grade crossings with preempted traffic signals at intersections in the state's other regions have the 10-second maximum clearance time.

9.3. ~~9.2.~~ Closure of the Commerce Street Grade Crossing

END OF HIGHWAY FACTORS AND RAILROAD GRADE CROSSING FACTUAL REPORT ERRATA