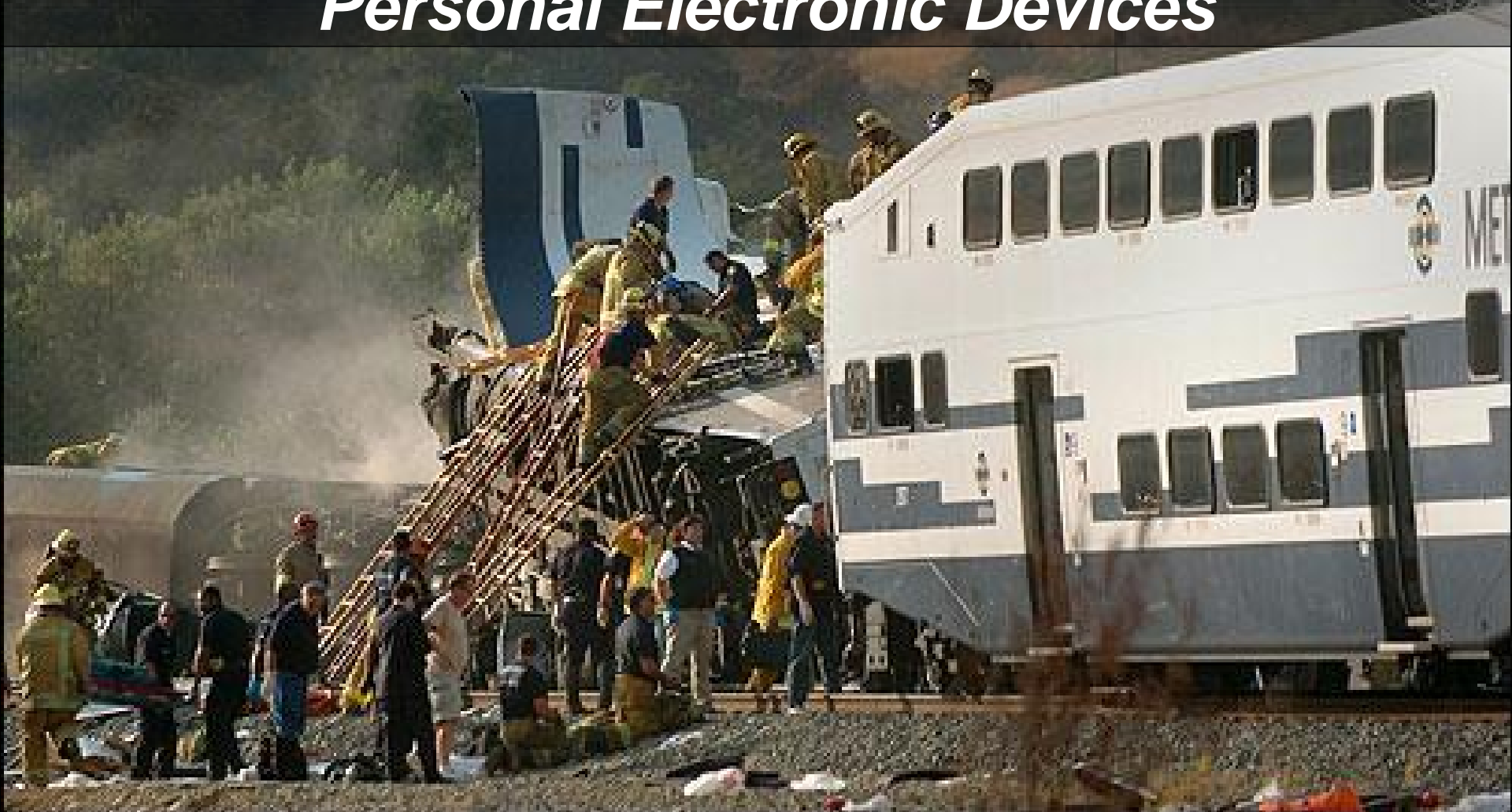


# ***Safety Issues Associated With The Use of Personal Electronic Devices***



**Jeff Moller**

**Association of American Railroads**

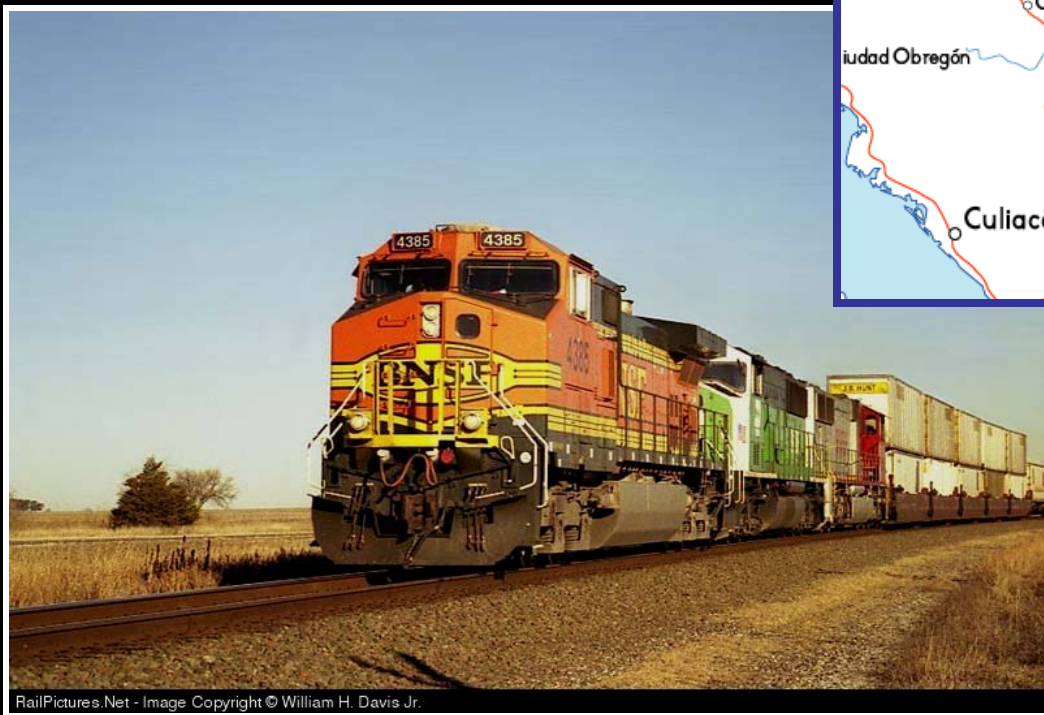
**2009 International Railway Safety Conference - Båstad Sweden**

# Accidents Reviewed

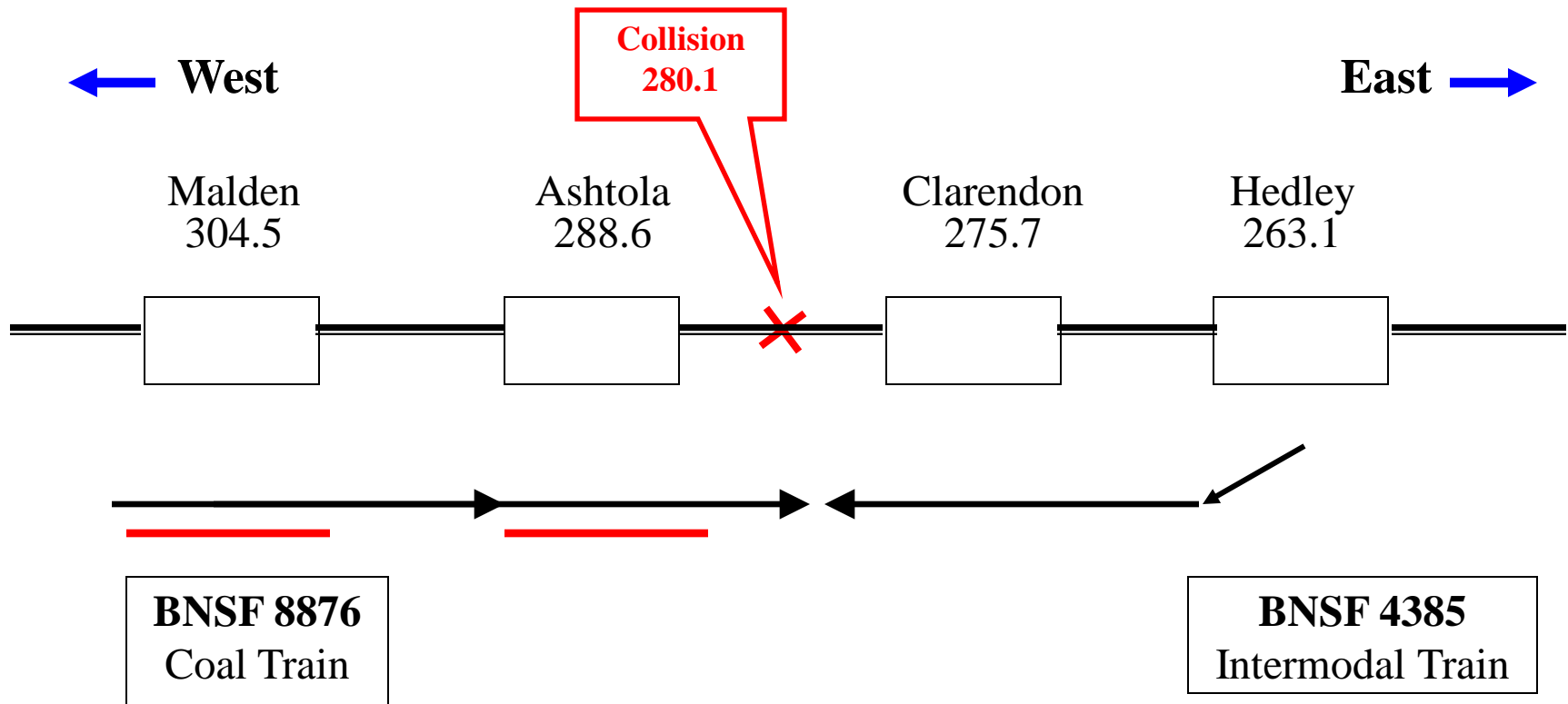
- **May 28, 2002; BNSX Clarendon TX**  
1 Fatality, 4 Injuries, \$8 Million Damages
- **September 12 2008; Metrolink Chatsworth, CA**  
25 Fatalities, 135 Injuries, \$7 Million Damages
- **May 8 2009; MBTA Green Line Boston, MA**  
62 Injuries, \$9 Million Damages

# Clarendon, Texas

May 28, 2002



# Collision of BNSF 8876 East & BNSF 4385 West Near Clarendon Texas; 1746, 28 May 2002



Locations of Cell Phone Use

# Track Warrant Form

(Suggested Form)  
Track Warrant

NO. \_\_\_\_\_, 19 \_\_\_\_

To: \_\_\_\_\_ At: \_\_\_\_\_

1.  Track Warrant NO. \_\_\_\_\_ Is Void.
2.  Proceed From \_\_\_\_\_ To \_\_\_\_\_ On \_\_\_\_\_ Track.
3.  Proceed From \_\_\_\_\_ To \_\_\_\_\_ On \_\_\_\_\_ Track.
4.  Work Between \_\_\_\_\_ And \_\_\_\_\_ On \_\_\_\_\_ Track.
5.  Not In Effect Until \_\_\_\_\_.
6.  This Authority Expires At \_\_\_\_\_.
7.  Not In Effect Until After Arrival Of \_\_\_\_\_  
\_\_\_\_\_ At \_\_\_\_\_.
8.  Hold Main Track At Last Named Point.
9.  Do Not Foul Limits Ahead Of \_\_\_\_\_.
10.  Clear Main Track At Last Named Point.
11.  Between \_\_\_\_\_ And \_\_\_\_\_ Make All Move-  
ments At Restricted Speed. Limits Occupied By  
Train.
12.  Between \_\_\_\_\_ And \_\_\_\_\_ Make All Move-  
ments At Restricted Speed. Limits Occupied By  
Men Or Equipment.
13.  Do Not Exceed \_\_\_\_\_ MPH Between \_\_\_\_\_  
And \_\_\_\_\_.
14.  Do Not Exceed \_\_\_\_\_ MPH Between \_\_\_\_\_  
And \_\_\_\_\_.
15.  Flag Protection Not Required Against Following  
Trains On The Same Track.
16.  Track Bulletins In Effect \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_,  
\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_,  
\_\_\_\_\_, \_\_\_\_\_.
17.  Other Specific Instructions: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

OK \_\_\_\_\_ Dispatcher \_\_\_\_\_.

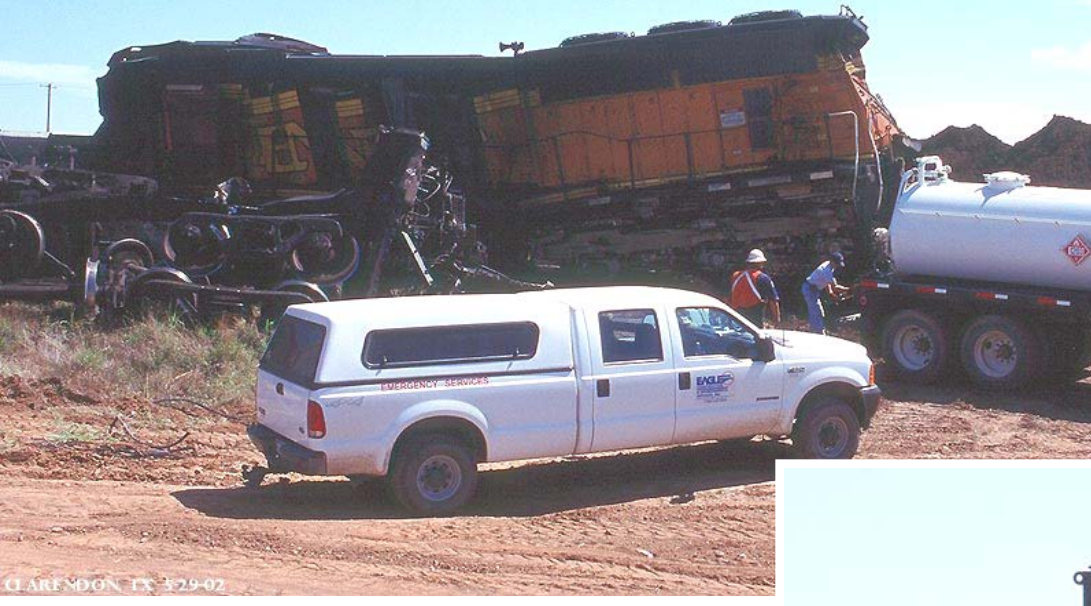
Relayed To \_\_\_\_\_ Copied By \_\_\_\_\_.

Limits Reported Clear At \_\_\_\_\_ By \_\_\_\_\_.

(Mark "X" in box for each item instructed.)



# Probable Cause



“The National Transportation Safety Board determines that the probable cause of the May 28, 2002, collision at Clarendon, Texas, was (1) the coal train engineer's use of a cell phone during the time he should have been attending to the requirements of the track warrant his train was operating under . . . .”





**Chatsworth, CA**  
12 September 2008





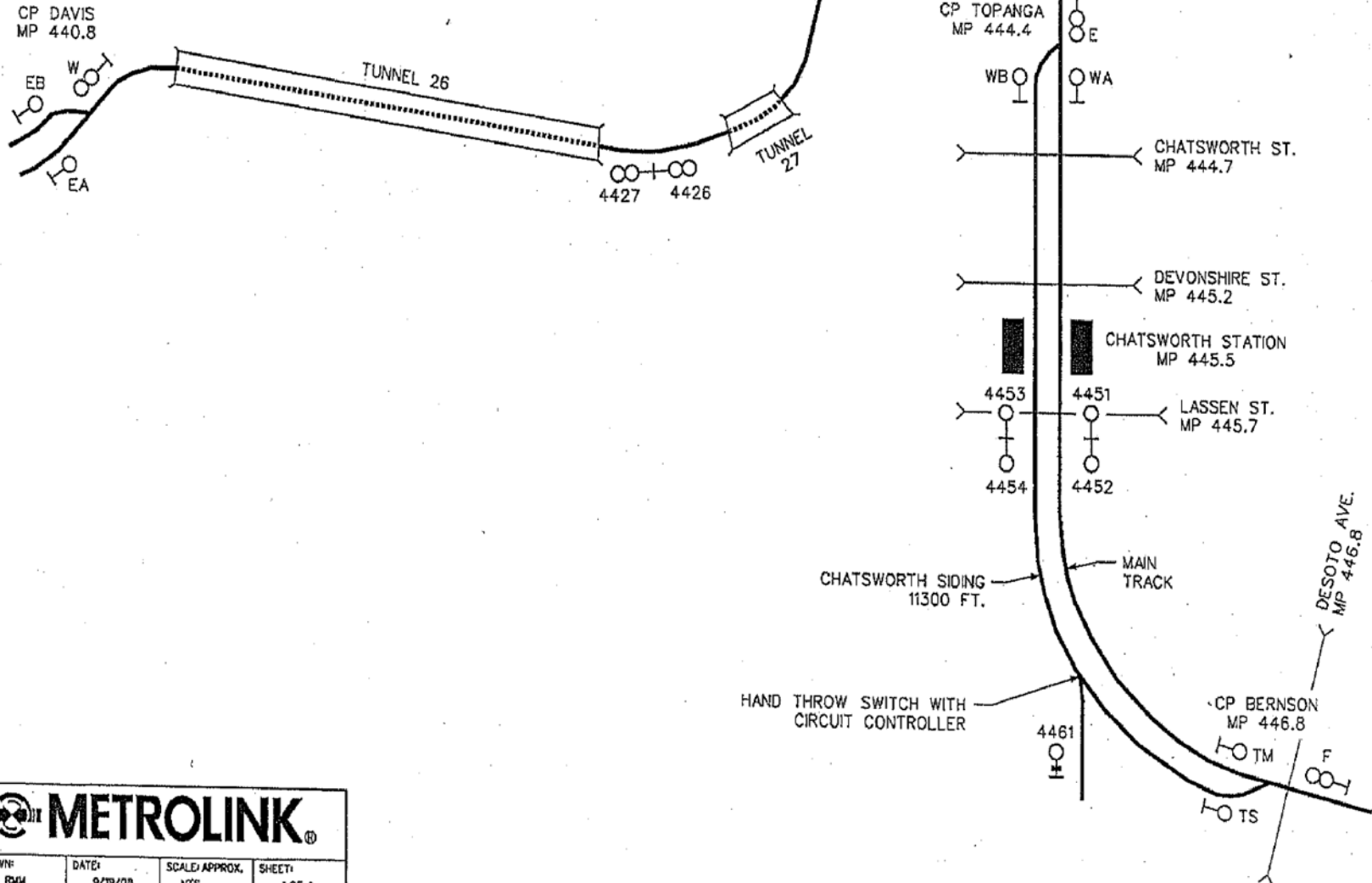
**Amtrak Stops North of Santa Barbara**

- San Luis Obispo
- Grover Beach
- Guadalupe
- Surf/Lompoc
- Goleta





# Chatsworth Siding



DRAWN: RMJ	DATE: 9/19/03	SCALE: APPROX. NTS	SHEET: 1 OF 1
REVISED:	DATE:	FILE NAME: CHATSORTH OVERVIEW.DGN	

# Investigative Reenactment



**View from the Metrolink Locomotive approaching the Switch at CP Topanga – in the Distance is the left hand curve.**

Signal Mast  
(unobstructed  
view), and  
switch.





# 3 Seconds to Impact



# Engineer Sanchez' Text Message Log

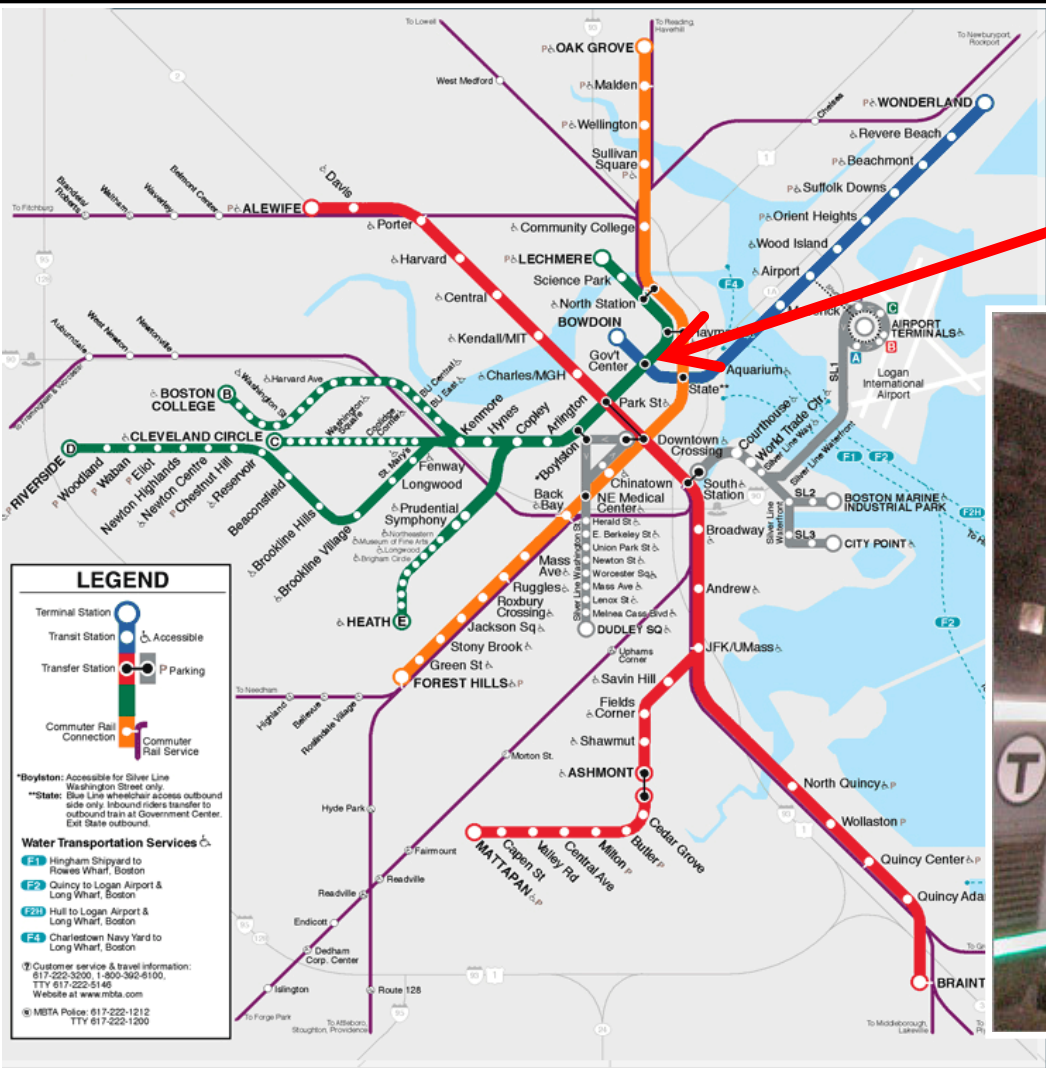
## 16:07 to 16:22

Received Date	Received Time	Sent Date	Sent Time	From Number	To Number	Message Length	Message
PDT	PDT	PDT	PDT				
9/12/2008	16:07:08	9/12/2008	16:07:08	(Engineer)	(Person A)	N/A	[text missing from SMS content report]
9/12/2008	16:08:47	9/12/2008	16:08:47	(Engineer)	(Person A)	46	(I'd prefer 2 meet them @ strathern or nowhere.)
9/12/2008	16:21:03	9/12/2008	16:20:54	(Person A)	(Engineer)	71	(I would like that too. We already need to meet 796. That would be best)
9/12/2008	16:22:01	9/12/2008	16:22:01	(Engineer)	(Person A)	32	(yea...usually @ north camarillo.)

**Engineer sent final message at 16:22.01; 22 Seconds Before Collision**



# Government Center Station Boston, MA 08 May, 2009





# Some Programs in Place at The Time of Accidents

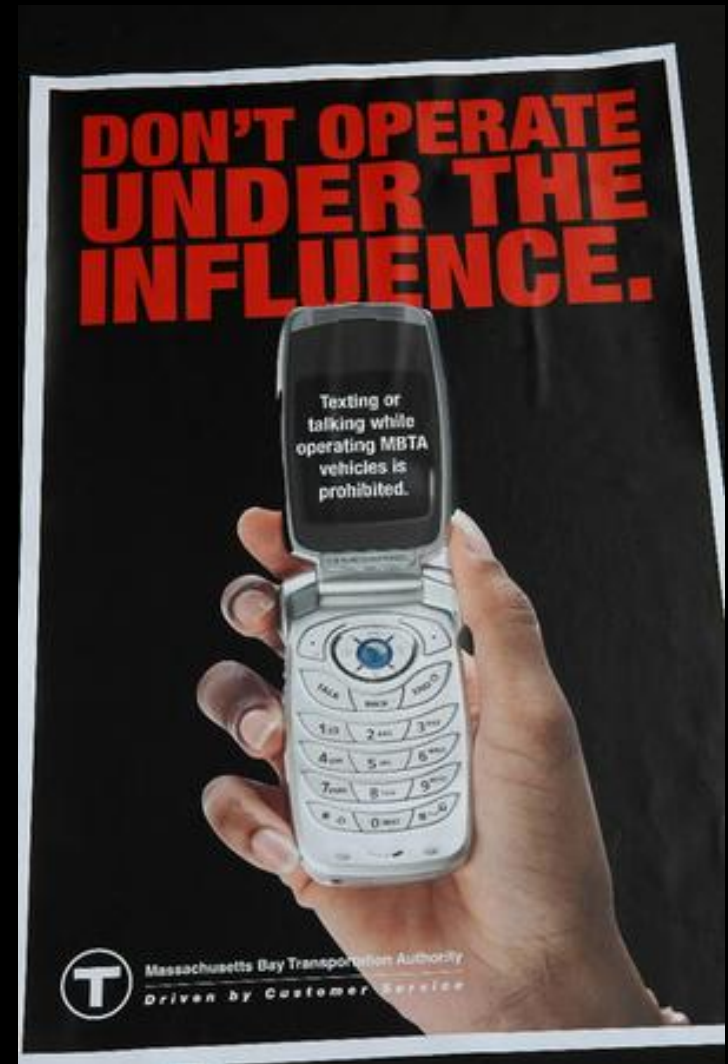
## General Code of Operating Rules

April 10, 1994

### 1.10 Games, Reading, or Electronic Devices

Unless permitted by the railroad, employees on duty must not:

- Play games
  - Read magazines, newspapers, or other literature not related to their duties;
- Or
- Use electronic devices not related to their duties.



**August 11, 2009**

**Washington, D.C.** So far, 17 states and the District of Columbia have banned text messaging while driving . . .

**Federal Railroad Administrator**  
*EMERGENCY ORDER 26*  
October 7 2008

To Restrict On-Duty Railroad Operating Employees' Use of Cellular Telephones and Other Distracting Electronic and Electrical Devices



**FOR IMMEDIATE RELEASE:**

November 21, 2006 SB-06-65

**NTSB RECOMMENDS BAN ON CELL PHONE USE BY BUS DRIVERS**

\* \* \* The recommendations are contained in the Board's report on a non-fatal bus accident that occurred November 14, 2004, on the George Washington Parkway in Alexandria, Virginia. The motor coach was traveling from Baltimore Washington International Thurgood Marshall Airport to Mount Vernon, Virginia. The accident . . . .



# Some Common Policies for Communication Devices

- **Prohibited Use; Not Applied to Radios, RCL, or GPS Devices When Inspecting Track**
  - While Driving Trains / Vehicles
  - While Engaged Certain Tasks (e.g. Safety-related or less than 1.2 meters away from track)
- **Some Permitted Uses**
  - During an Emergency
  - Safe Environment or with Supervisor Permission
  - Hands-Free Devices when Driving



# Issues

- **Compliance**

- **Devices Turned Off / Stored, Ear Pieces Off**
- **Legitimate Use**
- **Enforcement**
- **Signal Blocking**

Is the cell phone in use?





**TLK 2U L8R**



**Switch it off NOW**

Halcrow



A notre insu le portable s'avère vraiment insupportable.