

CITIZENS' CAMPAIGN TO FIX THE EXPO RAIL LINE

Led by Save Leimert, Expo Communities United & Baldwin Hills/Crenshaw Homeowners' Coalition
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EXCERPTS FROM THE PREPARED TESTIMONY & CROSS EXAMINATION OF

MAJ. RUSS QUIMBY (Ret.) - Internationally Recognized Rail Safety Expert & 1974 West Point Graduate

Delivered at the California Public Utilities Commission Expo Line Evidentiary Hearing on Dorsey & Foshay (Sept. 5, 2008)

I. Excerpts from the Prepared Testimony of Maj. Russ Quimby (Ret.)

Maj. Quimby's background and qualifications (pg. 2):

From July 2007 to May 2008, I was Asst. V.P. for Operations, Planning & Analysis at Rail Sciences Inc., where I served as an expert witness in legal cases, **conducted risk assessments of railroad operations, training, track, and equipment, and investigated rail related accidents.**

From 1985 to 2007, I was a safety engineer and investigator with the National Transportation Safety Board (NTSB). While with the NTSB, I was the Investigator-In-Charge and/or Chairman of the Mechanical, Track, or Operations Investigation Groups for all severity levels of railroad or rail-transit incidents, accidents, and disasters. I conducted investigations, wrote and prepared factual and analytical reports for public record, examined witnesses at public hearings and depositions, and supervised simulations and equipment test by carriers, vendors, and manufacturers. I participated in **57 major accident investigations**, 32 field accident investigations, 10 public hearings, 16 depositions, and 6 special studies. **I personally wrote 11 major accident reports for publication**, 8 field accident reports, and I conducted 10 sworn depositions proceedings. I was also **the originator or major collaborator for over 157 NTSB adopted recommendations.**

Maj. Quimby's expert opinion on the Farmdale Ave. crossing, which abuts 2100 student Dorsey H.S. (pg. 5):

In my opinion, the proposed at-grade crossing at Farmdale Avenue is not safe because it poses an **unreasonably high safety risk** to the students at Dorsey High School.

Maj. Quimby describing the potential for catastrophic accidents at the Dorsey HS/Farmdale crossing (pp. 7 - 8):

By "catastrophic accident," I mean an accident involving fatalities and/or injuries to a large number of people. As proposed the at-grade **Farmdale Avenue crossing creates the notable risk that a catastrophic accident** may well occur under one of several different scenarios. For example:

First, that a train will collide with a vehicle with sufficient force to either derail the train into and/or push the vehicle into the proposed 'holding pens' where several hundred students are trapped inside, **killing or seriously injuring scores of students in a single accident.**

Second, that a train will collide with a vehicle (particularly a truck or bus) rupturing and igniting a fuel tank which would **engulf students in the holding pen in flaming diesel or gasoline.**

Third, a combination of the above two scenarios where the students are **crushed and burned simultaneously by vehicles and/or a derailed train.**

Maj. Quimby describing the Western Ave crossing, which is 50 feet from 3400 student Foshay Learning Center (pg. 9):

This crossing lacks *any* safety margin for failure in human behavior. The timing is so precisely choreographed and tight that there was no time left in the design for the activation and movement of gates, so they were eliminated. This, in itself, tells me that **this intersection has 'no time' for safety.**

Any number of likely scenarios could trigger a delay in the crossing sequence resulting in an accident at the crossing, either separately or by interaction between vehicles and pedestrians, resulting in **serious injury or fatality.**

Maj. Quimby on MTA's Grade Crossing Policy, which determines whether crossings are grade separated (pp. 10 & 11):

Metro's Grade Crossing Policy is not a safety-based policy. In fact, as far as I can tell from [Expo Construction Authority CEO] Mr. [Rick] Thorpe's testimony, **the policy has nothing whatsoever to do with safety** and is concerned almost entirely with Metro's operational convenience regardless of safety concerns.

The policy cannot seriously be described as a safety policy because traffic volume and train frequency alone tell you very little about the safety of a rail crossing, particularly when traffic volume is reported on a per lane basis. As far as Metro's Grade Crossing Policy is concerned, for purposes of grade classification, a crossing that intersects a single lane street going in one direction with no pedestrian traffic is analyzed identically to a crossing that intersects twelve

lanes going in six directions with peak pedestrian traffic in the thousands per hour. As long as train headways and per lane traffic volumes fall within acceptable standards, a crossing will be designed at-grade with no need for further review or analysis.

The Metro Grade Crossing Policy is a logical operational policy from a rail perspective, but it does not nor should not replace a responsible, comprehensive system safety analysis, which should include a human performance study. The risky designs of these two proposed crossings illustrates the point that factors beyond train frequency and vehicle traffic must be taken into consideration to create designs that are reasonably safe for the public – and particularly for children. **If the proposed crossings at Western Ave. and Farmdale Avenue do not qualify for grade separation from a safety perspective, then no crossings would.**

II. Cross Examination from the Hearing Transcript (pp. 762 – 764)

Maj. Quimby's Answer:

I also gave [UCA/Fix Expo] a warning that after I reviewed the material, I may give them an opinion they might not like. [...] I emphasize the fact when I got into this business, **I won't trade my integrity for money.**

Maj. Quimby's Answer:

And what happens is if you slow the trains down, your window of hazard lengthens. And then you get the condition, the population to believe, well, the train is slow. It's hard to judge a train coming head on at you with a headlight on. And that basically causes the students, emboldens them to basically say, well, the train is only going ten miles an hour, I can beat it, and run across the tracks in front of the trains. **I guess in [National Transportation] Safety Board studies that we've done you end up creating as many problems as you solve by slowing the train down.** You just create a longer window of opportunity or hazard.

Expo's Question:

And your statement that the students would be embolden to run across the tracks, what do you base that on?

Maj. Quimby's Answer:

Well, they're going very slow, and you got **students who are impatient and standing there waiting for a slower train** to go by, and they feel like they have **more time to beat the train** across the tracks.

Expo's Question:

What about gates that go down, wouldn't that?

Maj. Quimby's Answer:

With pedestrians in particular, a lot of people feel, even if you have pedestrian gates there, they duck under them, walk under them, whatever. People ignore signs and gates. **25 percent of all vehicle collisions at grade crossings that had gates result in fatalities.** I mean so if you've got 25 percent of the people being killed at crossings with gates, you know, they drive around them and things of that nature. So a gate is like – it's more – obviously more active than a sign, but it doesn't prevent behavior.

Expo's Question:

Well, informing that opinion, wouldn't it have been useful for you to observe whether or not that's the case on other lines within Los Angeles?

Maj. Quimby's Answer:

I saw that at the Vernon Station.

Expo's Question:

You observed people crossing with the same sort of crossing barrier?

Maj. Quimby's Answer:

Yes.

Expo's Question:

And often, right, just all the time racing across?

Maj. Quimby's Answer:

Pretty much.

Expo's Question:

And you translate that opinion back to the same thing is going to happen at Farmdale?

Maj. Quimby's Answer:

I would say most certainly. And it happens generally. I'm not a behavioral scientist, but generally speaking, **the younger the population, the younger the person, generally the more apt they are to do that, because they're physically able to.** And I don't know, when you're young you don't have the rationale and experience as you do as you get older where you're more careful.