SUNDAY VIEWPOINT

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WARNING **SIGNALS**



The fatal crash of Metrolink commuter trains on Jan. 26 has highlighted the vulnerability of the area's rail lines. A southbound train struck an SUV left on the tracks and began a chain reaction involving a northbound commuter train and a freight train.

Sensors on rails could halt future crash tragedies

HE devastating Metrolink train derailments in Glendale raise a number of old and new questions — questions that pose serious concerns in terms of public safety and homeland security.

Metrolink service was first implemented 12 years ago on existing freight train rights of way in a well-intentioned attempt to improve the mobility of Los Angeles commuters. But it hasn't lived up to the billing - Metrolink's ridership is too small to produce measurable improvements on the road network. It also has a hidden cost — the risk inherent in putting frequent passenger trains on

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LOCAL VIEW

such an open, accessible right of way.
The Glendale crash makes this cost tangible in the most tragic way.

Operating commuter trains and freight trains on the same tracks is not unusual in cities in the West and Southwest, where local leaders have attempted to provide new transit options by grafting commuter rail service onto freight networks. But it presents a set of problems less prevalent in the Midwest and East, where commuter

rail systems have been in place for decades. In cities like Chicago and New York, commuter rail transit has former freight and intercity passenger train rights of way mostly to itself, and has few at-grade crossings with public roads, except in very outlying areas. These older, more established systems were built up more incrementally than Metrolink, and involve fewer engineering compromises.

And the compromises inherent in the Metrolink system involve great risks. Up until Jan. 26, the Metrolink system had more than a decade of good luck. But given the relatively high frequency of

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Better surveillance needed on nation's rail lines

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Metrolink collisions with vehicles, it was statistically inevitable that
Metrolink would eventually experience
a serious, collision-related derailment.
Metrolink trains have derailed before,
but on those occasions our luck held—
speeds were low and there were no
other trains in the vicinity. Injuries to
riders prior to Jan. 26 were minor and
rare—so rare that officials and riders
were content to pretend that injuries
were impossibilities.

Now we know better, but what can we do about it?

Reconstructing at-grade intersections between the region's streets and commuter rail lines would solve much of the problem, but is far too expensive to be feasible. Severing streets at rail intersections and walling off the rail rights of way would greatly disrupt road traffic.

The most cost-effective approach to protecting Metrolink riders would be to discontinue the service, but even if we did, we would be left with a serious problem.

If Metrolink commuter trains are vulnerable on freight trains rights of way, then freight trains are also vulnerable. Trains are difficult to derail by accident, but simple to derail on purpose. All that is required is to displace a rail.

Freight trains derail frequently, but

most events are minor. Union Pacific reports hundreds of small derailments a year, and these are just a cost of doing business. The public only notices freight derailments when lives are lost or there is extensive private property damage, such as Union Pacific's 18-car derailment in the city of Commerce in 2003.

Yet even though we don't give much thought to derailments, the threat is always present, especially in a post-9-11 world.

The bigger problem is that the Los Angeles freight system connects the largest, most productive port complex in North America — the ports of Los Angeles and Long Beach — to the economy of the United States.

This makes the Los Angeles freight rail network of national strategic importance.

Some parts of it are well protected, such as the Alameda Corridor, which is essentially a giant grade separation project.

But most of the freight rail network is not protected, and there are bottlenecks in the system that would be a source of substantial delay to port operations if subjected to a medium-speed freight train derailment.

And of course, the environmental and health hazards associated with some train cargo makes for an even greater threat.

Fortunately, this problem can be

addressed without a massively expensive effort to physically isolate freight rail rights of way.

Instead, we should saturate the freight rail network with electronic surveillance.

The freight train business is already a reasonably high-tech enterprise. There is some telemetry in place to help manage train traffic. However, much more is needed. Rails should be retrofitted with sensors to detect breaks or the presence of large metal obstructions.

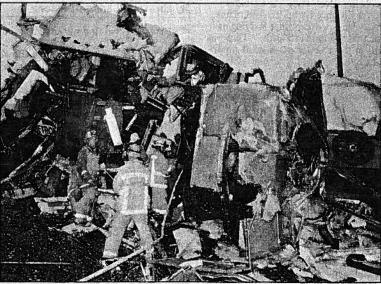
Every foot of track should be subject to video surveillance.

Such reforms are achievable, and at bearable cost. We are close to this level of surveillance on the Los Angeles and Orange County freeway network.

Saturation surveillance and related

telemetry would greatly improve the security of the Los Angeles freight rail system, but it would also reduce risks to our expensive, mostly inconsequential commuter rail service. Further, intensive surveillance would begin to address the vexing problem of suicides. If we can detect and locate pedestrians the moment they breach the right of way, we can get to them or their vehicles before trains do, even if we have to slow the trains to make time.

And because right-of-way surveillance has a triple payoff felt both locally and nationally, it should not be



Gene Blevins/Special to the Daily News

Firefighters from Los Angeles, Glendale and Burbank work through the mangled remains of the trains that crashed after hitting an SUV that was left on the tracks near the Glendale station.

up to the residents of Southern California to pay for the entirety of such a system. Nor should it be the sole responsibility of railroad carriers. National interests are at stake, and Congress should be prepared to share a significant portion of the cost with the rest of the country.

It is time to act. We have been warned.

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