

EXHIBIT 5-C

Docket No. DCA-08-MR009

**NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594**

**Post-accident Interim Safety Improvements
Established by Southern California Regional Rail
Authority**



SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY

**Exhibit 5-C Safety Improvements Established by
Southern California Regional Rail Authority**

As requested at the NTSB Public Hearing, March 3-4, 2009, this document outlines the numerous safety enhancements enacted by the Southern California Regional Rail Authority (SCRRA), Metrolink, following the September 12, 2008 collision between Metrolink Train 111 and a Union Pacific freight train. The agency will continue to cooperate with the NTSB in its investigation into the exact causes of the Chatsworth collision, and will continue to consider and implement enhanced safety measures, as appropriate, to prevent this type of event from happening again.

Immediate Safety-Focused Actions by the SCRRA Board of Directors

In the immediate weeks following September 12, the SCRRA Board of Directors moved swiftly in establishing a sweeping set of initiatives to enhance the agency's safety culture and to further continue its historic focus on safety innovation, independent of its role and participation in the ongoing NTSB investigation.

Formation of an Independent Commuter Rail Safety Peer Review Panel

At its September 26, 2008 meeting, the SCRRA Board authorized the establishment of an independent Commuter Rail Safety Peer Review Panel comprised of national commuter rail industry experts and academics to provide far-reaching safety recommendations to the agency. The Panel was tasked with focusing on all aspects of the agency's operations, including train operations; the inspection and maintenance of tracks, structures and the signals and communications system; passenger-car and locomotive inspection; and maintenance provided by Metrolink staff and outside service providers. Working against a 60-day timeline from the date the Panel was activated (October 10, 2008), the Panel submitted their preliminary recommendations to Metrolink in December 2008 and their final report in January 2009.

In its ongoing and heightened commitment to implement measures to enhance passenger safety on its rail system, Metrolink had already been implementing significant safety enhancements to the agency's commuter train operations, many of which were supported by the Peer Review Panel. By the time the Panel submitted its final report in January 2009, Metrolink had already initiated action on 19 of the Panel's 64 recommendations, many of which are addressed in this exhibit. In its final report, the Panel acknowledged that "...it observed a clear appreciation for the existing importance of safety at SCRRA."

Initial Safety Directives

By early October 2008, Metrolink had also moved quickly on several additional September 26, 2008 Board directives to enhance safety, including:

- An adjustment of train crew staffing to enable the agency to place a “second set of eyes” in control cabs.
- A review of the agency’s contract with Connex Railroad LLC/Veolia Transportation.
- An evaluation and update of the agency’s emergency preparedness and response plans and protocols.
- Implementation of an updated evaluation and accelerated strategy to deploy advanced train control technologies.
- A directive to pursue funding for safety enhancements from the North American Joint Positive Train Control (PTC) Program funded by the Federal Railroad Administration and any other sources of federal and/or state funding eligible for developing, implementing and/or operating a positive train control system for Metrolink.

The need for a national mandate to invest in our transportation infrastructure and rail safety cannot be understated. Our ability to implement new safety technologies requires a responsible investment at the local, regional, state and federal levels and expedited regulatory approvals. Working together with our member agencies, stakeholders and funding partners, Metrolink has an opportunity to move forward from the tragic collision of September 2008 and positively improve the safety of rail service.

Key Safety Enhancements September 2008 – March 2009

Following is a review of key short- and long-term safety projects Metrolink has enacted in the months following September 12.

Continued Use of Extra Board Employees as a “Second Set of Eyes” in Trains

As noted, Metrolink began employing a “second set of eyes” in trains immediately following the September 12 collision. Metrolink continues to use Extra Board employees to serve as a “second set of eyes” in trains and is accelerating the hiring and training of engineers and conductors needed to implement the Orange County Transportation Authority’s Metrolink Service Expansion Program (MSEP) to use them in this capacity until alternate recommendations are implemented or MSEP service begins in 2010.

Since the December 2008 holidays, “second set of eyes” have been in place on approximately 23+ trains per weekday. In January 2009, the SCRRRA Board also authorized the hiring of additional Los Angeles County Sheriff Law Enforcement Technicians to provide fare enforcement so that conductors can provide “second set of eyes” when trains are operating in the cab-forward position and can focus on safety communications with engineers

Accelerated Installation of Automatic Train-Stop Technology

In January 2009, Metrolink received approval by the Federal Railroad Administration to install Automatic Train Stop (ATS) technology at 43 additional speed-sensitive locations as one critical interim safety measure while the agency is working to accelerate the deployment of PTC. The ATS system, expected to be installed by early summer 2009, will provide greater situational awareness for passenger train engineers and will establish an increased layer of protection. Importantly, the new installations are compatible with the existing Metrolink and Amtrak passenger train ATS-equipped fleets and are being procured and installed without delaying vital resources from expediting PTC deployment.

Expedited Procurement of Inward-facing Video Cameras

Metrolink is proceeding with the procurement and installation of inward-facing video cameras in all of its locomotives and lead passenger cars.

As the first FRA-recognized passenger or freight railroad in the country to have this equipment, Metrolink has taken the lead in rail safety innovation as it previously did with the purchase of the first Crash Energy Management technology-equipped commuter rail passenger cars in the United States and the creation of the first Sealed Corridor program in a densely populated urban area.

A total of 218 video cameras and recorders will be purchased and installed at an estimated cost of nearly \$1 million. Installation in the agency's 52 locomotives is expected to begin in summer 2009, followed by the delivery of 57 new, camera-equipped lead passenger cars in 2010.

The implementation of inward-facing video cameras will help to deter the type of unauthorized activities revealed in the NTSB investigation, including unauthorized use of cell phones and unauthorized occupancy in the cab car. The authorization to procure the cameras was approved by the SCRRRA Board in January 2009 and the agency was well on its way to having these cameras in operation prior to the NTSB hearing in March 2009.

Accelerated Strategy for Positive Train Control Deployment

Metrolink is implementing an accelerated strategy to have PTC operational on all Metrolink equipment by 2012, in conjunction with the BNSF and UP freight railroads' goal to complete the installation of wayside PTC equipment along their rights-of-way in Southern California by 2012. Metrolink's objective is to have the full PTC system in place on its operating properties well in advance of the 2015 federal mandate.

In Fall 2008, Metrolink was an active participant in Congressional hearings, meetings with Senators Diane Feinstein and Barbara Boxer, NTSB Board member Kitty Higgins, among others, and advocacy efforts that led to the passage of HR 2095, the Rail Safety Improvement Act of 2008. In October 2008, agency representatives also participated in a hearing before the California State Senate Transportation and Housing Committee, which focused on efforts to

enhance passenger and rail freight safety and funding options for the state's share of vital infrastructure investments and PTC.

Metrolink's current total project estimate for the PTC system is \$201 million. As of March 2009, Metrolink has received \$28.1 million in funds for the implementation of PTC system on its commuter train system. The funds are a combination of \$21.8 million in federal formula transit funds from the economic stimulus package recently passed by Congress and \$6.3 million from the five county transportation agencies that fund Metrolink's operations. The federal funds are allocated according to a distribution formula and will be channeled to Metrolink through those five agencies.

In support of this commitment of funds, the Los Angeles County Metropolitan Transportation Authority (METRO), one of Metrolink's member agencies, approved a motion to prioritize Los Angeles County Measure R local sales taxes earmarked for commuter rail funding for PTC and other rail safety improvements. The motion also authorized METRO to use a broad range of its financial resources if necessary to assist Metrolink cashflow costs in support of PTC and to expedite implementation in Los Angeles County. The commitment includes authorization to advance up to \$200 million to Metrolink for PTC and even the issuance of debt if necessary, to meet the accelerated project schedule.

Metrolink is aggressively advocating to secure federal and state funding needed for PTC, as well as its other critical commuter safety and infrastructure projects, such as eliminating single track sections on its railroad. Metrolink continues to work closely with other regional, state and federal transportation agencies and coalitions to advance its safety enhancement projects.

Since 1991, Metrolink has been putting the incremental steps in place to build the foundation for an eventual PTC system, all of which will help expedite implementation once it is ready for the Southern California rail network. These steps include building a centralized dispatch system, upgrading existing signals with longer lasting, energy efficient LED bulbs, converting communications equipment to a microprocessor and solid state based system, starting the installation of a fiber optic communications network and starting to digitally map the railroad.

As part of the agency's efforts to develop Metrolink's PTC infrastructure, the agency has conducted numerous site inspections of PTC pilot programs, coordinated and participated in workshops and meetings with representatives from BNSF, UP, Amtrak, Caltrain and Wabtec.

Swift Action on Train Operations Rules, Laws and Regulatory Compliance

Metrolink has worked closely with its operations contractor, Connex Railroad, to reinforce safety as the agency's top priority. Following the September collision:

- Metrolink worked with Connex to implement increased efficiency testing among Connex, UP, BNSF and Amtrak employees, including increased banner tests, diversion testing

(with Metrolink dispatchers) and restatement of General Code of Operating Rules 6.8 (stopping clear) and 9.5 (where stops must be made).

- Connex conducted three train and engine crew Safety Stand Downs (September 2008 – staying focused on calling signals teamwork; October 2008 – a review of E026; and November 2008 – a review of new rules changes).
- Authorized Connex to hire two additional Efficiency Testing Managers under the current Metrolink funded contract to increase efficiency testing and joint testing. In addition, Connex hired a new Vice President of Rail Safety & Compliance and hired a new Rules and Safety Compliance Manager.
- In February 2009, the Metrolink Board Chairman and senior management met with Connex engineers, their union and Connex senior management to reinforce compliance with all safety regulations and a shared commitment to enhanced passenger safety.
- On March 5, 2009 Metrolink instructed Connex to remove its General Manager and Assistant General Manager from service on the Metrolink system.

In exercising its right to request the removal of any Connex personnel providing service to Metrolink, the agency reiterated its expectation that its contractors make safety their number one priority and ensure that their employees follow that priority and use good business practices in discharging their duties and responsibilities under each of Metrolink's contracts, while also providing the highest quality service. All Metrolink contractors are required to adhere to stringent safety standards, among the most rigorous in the railway industry, which are regulated by state and federal authorities.

Staff Restructuring and Augmentation to Enhance Focus on Safety

In February 2009, Metrolink restructured a number of its internal positions to optimize its ability to oversee its contract operations provider, Connex, and implement additional safety-focused enhancements. After a detailed evaluation of recommendations made by the independent Commuter Rail Safety Peer Review Panel and existing staff resources, the agency made several appointments, added new positions and made a change in a key reporting relationship. The Director of Operations will have the responsibility of establishing a new Field Operations division that will be crucial to establishing a greater direct role in efficiency testing of train crews in Metrolink's service area. The Manager of System Safety, who will report directly to the Chief Executive Officer, will have a major role in the development of a stronger safety culture throughout the organization and its contractors.

Metrolink is also in the process of filling three new positions, Operation Compliance Officer, Road Foreman and Manager, Rules & Training.

Safety-Focused Rules Changes

Several rules changes have been enacted by the Timetable Committee, an inter-agency group comprised of Metrolink Operations staff, Connex Management, Maintenance of Way and Signal & Communications staff, North County Transit District (Coaster) staff, Amtrak staff and others

governing the use of electronic devices, the role of the conductor for calling the signals, and for train speed reduction when approaching a yellow signal. CPUC and FRA representatives regularly attend these meetings. The changes are as follows:

Rule 1.10 Electronic Devices

Updated the existing rule to be consistent with EO26 and the new CPUC rules on cell phones, but did not change the basic restriction in place prior to the Chatsworth collision.

Rule 1.47.1 Calling Signals

Clarified the role of the conductor in the body of the train for calling signals and actions if a signal is not called.

Rule 9.1.9 – 9.1.12 – 9.1.7 – 9.1.11

Reduce the speed of trains when approaching a yellow signal.

Additionally the Timetable Committee is developing Red Zone rules that will focus communications between conductors and engineers when they are approaching restrictive signals. Conductor's actions will be restricted to safety critical communications and passenger service duties will be deferred.

Review of Hours of Service

Metrolink is an active participant in FRA's ongoing review of the hours of service issues. The agency will comply with any regulatory changes issued by the FRA. In addition, Metrolink, in cooperation with its operating contractor, will contract for and conduct its own review by the end of 2009 of its contractor's hours of service split shift schedules to determine any risk factors.

Expedited Plan to Transition from the Digicon System

Metrolink is moving forward to develop an interim action plan to assure continued availability of the Digicon dispatch system until the new system is in service. By mid-late 2010, the Digicon dispatch system will be replaced with a PTC-compatible system as an integrated component of the overall PTC system.

As demonstrated by the numerous actions outlined in this document, Metrolink is unwavering in its commitment to enhance passenger safety. The SCRRA Board of Directors, senior management and staff are focused on strengthening its agencywide safety culture, and on ensuring that Metrolink's operating providers operate with safety as their number one priority.