

Marin / Sonoma

ON TRACK

FRIENDS OF SMART • ISSUE 7 • JULY 2007



SAN RAFAEL DEPOT

Giving Passengers Priority

by Steve Birdlebough

When numerous trains run on the same right of way, it is important to have policies, systems, and procedures that get passengers to their destinations on time. The railroad's control center, staffed by a team of seasoned dispatchers is key to making sure that schedules are met.



Lionel Gambill visits the Control Center for the Sacramento Light Rail System. Sacramento has expanded its original 16-mile system three times, and now operates two lines with trains on 15-minute headways. If a train is more than three minutes behind schedule, the operator must notify one of the two dispatchers.

We have visited several rail control centers recently to observe their methods. Many people experiencing delays while riding Amtrak hear announcements that their train is waiting on a siding for a lucrative freight train to pass. This creates a false impression that freight trains have priority over passenger service, when in fact other factors, including dispatching, are most responsible.

Federal law gives Amtrak passenger trains priority over freight trains, but fiscal policies and some railroad cultures result in operating decisions, equipment failures, and track maintenance activities that too often work to defeat the law. By contrast, SMART owns the right of way, has the right to control dispatching on the line, and has an operating agreement with the freight service that gives passenger trains priority. Skilled dispatching can make SMART trains run on time.

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TOP TEN FACTS ABOUT SMART

Last year's 65.3% vote in favor of the SMART Rail and Trail Project was sufficient to convince the California Transportation Commission to continue funding design and environmental work that will allow train service to begin as soon as possible. At the same time, the campaign showed that some key elements of the rail plan are misunderstood. As you talk with friends and neighbors, please take time to be sure they are aware of these issues.

Emissions Tests of prototype diesel exhaust systems show the SMART railcars can actually cleanse the air of smoke particulates, and the trains are expected to use greenhouse-gas-reducing biodiesel (B-20). Drivers that get out of single occupant vehicles and onto the train will greatly diminish their contributions to climate change and air pollution.

Passing Tracks Trains will run both north and south on the SMART right of way at all times. Passing tracks allow for reliable on-time operations, while well-designed signals and communications assure that single-track operations are safe and secure. Other successful single-track passenger services in California are the Capital Corridor, San Joaquins, Altamont Commuter Express, Metrolink, and San Diego Coaster.

Ridership The 1.2 million annual riders expected on SMART trains is comparable to the number riding several other successful rail services in this State. The suburb-to-suburb Inland-Valley-Orange-County Metrolink has a million riders per year; the San Diego Coaster 1.5 million riders per year; the Capital Corridor 1.2 million per year; and the Altamont Commuter Express 750,000 per year. Four independent ridership analyses have confirmed SMART's peak hour ridership estimates. Most riders are expected to have destinations other than San Francisco.

Freight Passenger service has priority over freight service under the operating agreement already in effect between SMART and the freight operator, the North Coast Railway Authority. In addition, SMART not only owns the right of way between Healdsburg and Larkspur, it has the right to control minute-to-minute dispatching activity so that passenger and freight trains do not interfere with one another.

Quiet Zones Train horns have been silenced where quiet zones have been adopted in nine California cities. SMART has budgeted to assist in the implementation of appropriate quiet zones in Marin

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MISSION STATEMENT

FRIENDS OF SMART
IS A CITIZENS GROUP
DEDICATED TO
INFORMING THE PUBLIC
OF THE BENEFITS
OF RAIL AND SMART
GROWTH IN MARIN AND
SONOMA COUNTIES.

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Clearing the Air

by Willard Richards, Ph.D.

A commuter who decides to ride SMART instead of driving on Highway 101 will, on average, reduce his or her carbon dioxide emissions during that part of the commute by a factor of four, and nitrogen oxides emissions by factor of six! Particle (black smoke) emissions are likely to be reduced by a factor of 40 or more. The elimination of black smoke from the diesel engines SMART will use is the result of using an oxidizing catalyst and particle trap in the engine exhaust system.

Thirty years ago, taking the lead out of gasoline allowed catalytic converters to be used on automobiles. This resulted in major improvements in urban air quality. Now, with most of the sulfur removed from diesel fuel, oxidizing catalysts and particle traps can be added to diesel exhaust systems, and this will also have important air quality benefits. This new technology is required for 2007 model year vehicles used on roadways and for 2011 model year railcars such as the ones SMART intends to purchase. The particle traps on prototype test engines were so efficient that there were fewer particles in the exhaust than in the air entering the engine through the intake manifold. The engines in the SMART railcars can have the same air-purifying effect as the bag in a vacuum cleaner!

As bus fleets are modernized over the next dozen years, we can expect cleaner exhaust, although emissions per seat mile will be about twice those from the railcars that SMART plans to use. Work is also progressing to retrofit exhaust emission control systems on freight locomotives so that they can take full advantage of the ultra-low sulfur fuel. ✂

Emergency Preparedness

by Lionel Gambill

Residents of Sonoma and Marin Counties live every day with the knowledge that their cities lie in the San Andreas Fault Zone. What role would SMART play in the event of a major earthquake or other emergency?

Experience tells us that it is important to have transportation alternatives when disaster strikes. BART and AC Transit came to the rescue of numerous travelers when fire closed the I-880 maze in the East Bay recently.

Similarly, when the Loma Prieta quake struck, the Cypress (elevated) freeway in Oakland collapsed, causing most of the quake's fatalities. The Embarcadero freeway in San Francisco was severely damaged and declared unsafe. Part of the Bay Bridge fell, blocking all traffic. Minutes after the Earth stopped moving, BART ran a train through the tunnel under the Bay to make sure it was safe, then resumed normal operation. Rail services on Amtrak, Caltrain Muni Metro were never interrupted.

The Northridge quake's epicenter was a couple of hundred yards from a busy rail corridor. It derailed a freight train, but freight, Amtrak and Metrolink trains were running the next day. Newspaper front pages

Trains in China and Japan

by Walt Strakosch

There is nothing like a trip to Asia to remind us of the value of good public transportation. From Hong Kong's Chop Lok Airport there is a new train line that makes a quick 20-mile trip to downtown. We then connected to the subway-efficient and well used-to our hotel.

Shanghai has a Maglev connecting the airport with the central city, and four subway lines. The newest one, Line 4, has glass doors separating the platform from the tracks. When the train comes in all of the doors open simultaneously. Maglev is a 20-mile system that runs from the Longyang Subway stop to the airport in eight minutes with a speed of 180 MPH. Subway tickets are machine sold in both Chinese and English.

In Japan we rode the Shinkansen from Kyoto to Tokyo, a distance of about 235 miles in a little over two hours. A work-horse system since 1964 is well run, smooth and runs as often as every 10 minutes.

The Tokyo system of subways and suburban rail is something again. Tokyo has to have one of the most extensive rail systems of any city. When lines connect, there are usually not just two but may be as many as four or five. I easily get around in most world subway systems but Tokyo is something else. It is efficient and used by hoards of people, but is the only time I had to hold up a sign that said, "Does anyone speak English." Yes, someone came up very promptly and helped.

Seems like everyone else gets it when it comes to good public transportation, I wonder why we have so much trouble? ✂

carried spectacular photos of the I-14 flyover, which had fallen down onto I-5. Hours after the quake, Metroliner commuter trains were running through a tunnel directly underneath the collapsed flyover.

In addition to providing alternative transportation and channels of communication, rail systems train personnel in advance for all kinds of emergencies. SMART can become an integral part of the emergency response network for Marin and Sonoma counties. ✂

Lionel Gambill is a former member of the Board of Directors for California Operation Lifesaver.

Giving Passengers Priority

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We visited the large and highly automated BART control center in Oakland, the much smaller Regional Transit system in Sacramento and the passenger-freight control center for the Trinity Railway Express between Dallas and Ft. Worth, TX. Good communications systems and the ability to adapt schedules to current conditions stand out as keys to success.

Dispatchers are responsible not only to keep trains on schedule, but to mobilize responses to any emergency. For example, when we visited the BART control

Top Ten Facts About SMART

Continued from page 1

and Sonoma counties. Each quiet zone can apply both to passenger and freight trains.

Finance The capital and operating costs for the project have been thoroughly reviewed by a distinguished panel of experts in railroad construction and administration (see Panel at right). Their recommendations were included in the itemized cost reports which formed the basis of the published expenditure plan in 2006; these reports will be updated to account for price changes.

Congestion SMART addresses congestion in three ways: riders reduce vehicle miles traveled and vehicle hours traveled in the corridor; trains give people a reliable travel option unaffected by highway congestion; and rail stations enable the creation of walkable places where people are less dependent on their automobiles. Cities with passenger rail service are less affected by congestion than in those without it.

Vehicle Type The self-powered railcars that SMART plans to use can form trains of two or three vehicles that fit easily within a city block while carrying 180-240 passengers, so traffic is not impaired. They will have cabs at both ends, so as to operate in either direction; they can use greenhouse-gas-reducing biodiesel (B-20); and they are more quiet than an ordinary locomotive. These railcars are far better suited to operating conditions in the SMART Corridor than BART, dual-mode, monorail, or other vehicles that have been proposed from time to time.

Buses SMART trains will enable better bus service by providing high speed service in the main north-south corridor at a lower operating cost per-rider than buses. Bus operators will be able to concentrate on the needs of local and connecting customers. Since Sacramento added rail service, transit ridership there including bus patronage has risen 175%. St. Louis, Los Angeles, and other cities have had similar experiences.

Larkspur The station at Larkspur serves an important regional purpose, even though the number of Marin and Sonoma county commuters bound for San Francisco appears to be declining. The station is located on existing SMART right of way, less than four-tenths of a mile from the ferry landing, about the same distance as between the San Francisco ferry landing and the Embarcadero BART Platform. ❖

center, a car suspension failure had required some passengers to be evacuated, and temporarily closed the line while the car was moved to a repair site. Well trained and creative dispatchers are a key to successful operation of a busy rail system.

(Visit the Friends of SMART website at www.friendsofsmart.org for more information about passenger train priority and dispatch systems.) ❖

Steve Birdleough, Chair of Friends of SMART, was active in the successful effort to bring light rail service to Sacramento.

Operation Lifesaver

by Eric Schatmeier

Most people know it is far safer to ride a train than to drive a car.

However, some people fail to respect the fact that carelessness near train tracks can be fatal. Because trains are soon likely to reappear on the SMART right-of-way, it is time to consider Operation Lifesaver as a means of making everyone in Sonoma and Marin counties more safety-conscious near the tracks.

Operation Lifesaver is a nationwide organization dedicated to safe practices near railroad property. It educates drivers, encourages best engineering practices, and promotes vigorous enforcement of right-of-way rules to prevent injury or death along the state's railroads. California now has more passenger trains than ever before, and we lead the nation in right-of-way injuries and deaths. More trains, more cars and more people make more opportunities for them to run into one another.

Information and Education Equals Safety

Education informs professional and student drivers as well as youths how trains can operate at any time on any stretch of track, how trains travel in both directions, and cannot stop on a dime. Some people learn for the first time that trains can not swerve to avoid collisions, and how a collision between a train and a car is like a truck hitting a soda can. Informed drivers and youth can respond to well designed grade-crossings, gates and signals that fully alert drivers and pedestrians to approaching trains.

Unlawful to Drive Around Crossing Gates

It is not only dangerous, but it is unlawful to drive around crossing gates or disregard warning devices around railroad tracks. Railroads are on rights of way where access is restricted or forbidden, and walking or jogging on tracks or crossing them anyplace but at designated crossings is trespassing. Nearly all the sensational accident stories in the media have a violation of one of these rules as the root cause. Operation Lifesaver urges consistent enforcement of the law for safety around a railroad right of way as a means of deterring risky behavior.

Become an Operation Lifesaver Volunteer

Operation Lifesaver is a small non-profit organization that relies on trained volunteers to spread the word to interested audiences, using materials provided by government and business contributors. If you are interested in becoming an Operation Lifesaver volunteer or would like to sponsor the organization, consult the website at www.caol.us or phone (877) TAP-CAOL (877-827-2265). ❖

Eric Schatmeier is a former member of the Board of Directors for California Operation Lifesaver.



Marin/Sonoma ON TRACK

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SMART FACTS

Quiet Zones

Over 260 cities in the United States have established zones where train horns do not sound, according to records of the Federal Railroad Administration.

The following California cities have established Quiet Zones:

Campbell Placentia
Richmond Riverside
Sacramento San Jose
West Sacramento

Destinations

Destinations for
Southbound Commute
Autos Crossing the
Marin-Sonoma
County Line:

Marin	53%
SF & south	30%
East Bay	9%
Other	8%

Source: Transportation
Authority of Marin



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CALENDAR OF EVENTS - SUMMER/FALL 2007

June 30, July 1-4	Sat-Wed		Marin County Fair, San Rafael Civic Center
July 18	Wed	11:30 am	Friends of SMART meeting, 42 Hillcrest, San Rafael
	Wed	1:00 pm	SMART Board meeting, San Rafael City Hall
August 15	Wed		Grand Tour of Rail & Ferry Services (see below)
	Wed	11:30 am	Friends of SMART meeting, Santa Rosa, 555 5th St, 3d. Fl.
	Wed	1:30 pm	SMART Board meeting, Sonoma Co. Adm. Bldg. (tentative)
August 20	Mon	7:00 pm	North Bay Rail Forum, LWV office, San Rafael
Sept 13	Thurs		Grand Tour of Rail & Ferry Services (see below)
Sept 19	Wed	11:30 am	Friends of SMART meeting, 42 Hillcrest, San Rafael
	Wed	1:30 pm	SMART Board meeting, San Rafael City Hall
Oct 10	Wed		Grand Tour of Rail & Ferry Services (see below)
Oct 17	Wed	11:30 am	Friends of SMART meeting, Santa Rosa, 555 5th St, 3d. Fl.
	Wed	1:30 pm	SMART Board meeting, Sonoma Co. Adm. Bldg.

For more information, go to: www.friendsofsmart.org

Grand Tour of Rail and Ferry Services in the Bay Area

SAVE THE DATE: • WEDNESDAY, AUGUST 15 • THURSDAY, SEPTEMBER 13
 • WEDNESDAY, OCTOBER 10, 2007 • 9:45 AM TO 6:30 PM

Beginning and ending at the Larkspur Ferry Terminal

Relax and experience the following services:

Larkspur Golden Gate Ferry • San Francisco Light Rail-N Judah Line
 CalTrain Station and equipment-4th & King St. • Alameda/Oakland Ferry
 AMTRAK Capitol Corridor • Altamont Commuter Express • BART

Details: Carpools between Santa Rosa and the Larkspur Ferry Terminal can be formed at the CalTransPark'nRide. Trains and Ferries are accessible for bicycles and wheelchairs.

For further information call

707-578-9133 (days) 837-8814 (evenings) or e-mail: fos@pacbell.net

Reservations: \$50 includes fares on ferries and trains other than BART, as well as a lunch salad at Scott's Sea Food, Jack London Square; does not include the cost of beverage.

Make checks payable to "SCT" and send with your e-mail address and phone number to:

Willard Richards, Treasurer, 1009 Hyland Dr., Santa Rosa, 95404