SPRINTER:
Rails to the Heart of San Diego's North County

By Gena Holle

On the sandy shores of the Pacific Ocean between Los Angeles and San Diego is the appropriately-named city of Oceanside. Beyond its crowded beaches and coastal breezes is the Oceanside Transit Center, a waterfront destination for Amtrak's *Pacific Surfliner* and augmented by Metrolink commuter trains to north Los Angeles and COASTER trains heading south to San Diego. And as of March 9, 2008, the Oceanside also hosts the SPRINTER regional rail service of the North County Transit District (NCTD).

Winding through the communities of Oceanside, Vista, San Marcos and Escondido, SPRINTER neatly parallels California's Highway 78 but represents more than a new travel conveyance. It also marks the renaissance of passenger rail in the corridor after more than six decades.

Rail Through the Grapevines

Regional rail — a fixture in Europe and abroad for decades — in a sense developed its roots in San Diego's North County during the mid-1800s boom that eventually led to today's SPRINTER. The first Santa Fe Railroad train rolled into San Diego on November 16, 1885, bringing an influx of new residents that created a flurry of growth from the Mexican border north.

To Escondido's developers, a railroad connection was crucial to continued prosperity. In 1886, Escondido Land and Town Company owners and a group of businessmen planned a railroad from Oceanside via Escondido, Poway and El Cajon to San Diego. Santa Fe won the contract and formed the San Diego Central Railroad, which was later consolidated with other branch lines into the California Central Railway. Construction began in early 1887 and the new service commenced December 31, 1887, with an invitation-only junket for thirty prominent San Diegans.

By May 20, 1888, through trains operated between Escondido and National City, and a round-trip was $5.70. Later, three daily local trips ran in each direction between Escondido and Oceanside, connecting there to mainline trains. Despite its nickname, the *Grapevine Flyer*, as Escondido was known for its vineyards — it hardly flew down the tracks. A one-way trip took about two hours with a 35-cent fare.

San Diego's economic boom collapsed in 1889. Half of San Diego's population left for other communities and railway construction beyond Escondido ceased. Passenger services gradually receded, until just one freight-hauled passenger coach operated until 1945. Escondido remains the line's eastern terminal, however its train station has been relocated as a museum in Grape Day Park.

After the bust, the Santa Fe was reorganized, merging several railroads – including California Central – into a new company, the Southern California Railway. Santa Fe declared bankruptcy in 1893, but reemerged in 1895 as the Atchison, Topeka & Santa Fe Railway.

Reviving Passenger Rail in North County

After more than 30 years without passenger trains on the Escondido Branch, in 1977, Jerry Harmon, an Escondido City Council representative on the North County Transit District's (NCTD) Board of Directors, suggested a rail revival to John Jontig, NCTD's Executive Director. Jontig agreed the high demand for transit services between Escondido and Oceanside warranted considering alternate public transit modes. NCTD's board voted to study an Oceanside-Escondido train, followed by the endorsement of the county's director of transportation and the Oceanside City Council.

Jontig envisioned self-propelled rail vehicles, "a sort of bus on rails," he said, referring to the Budd diesel-powered trains that didn't use locomotives, also known as rail diesel cars. They were popular on the East Coast, Canada, and called rail buses in Europe.

Although the Santa Fe initially dismissed the idea of restoring passenger trains on its tracks, the NCTD persevered. In 1987, the San Diego Association of Governments (SANDAG) – an association of local San Diego county governments and the region's planning agency – formally recommended buying Santa Fe's right of way and the rail bus concept. The agency also had capital planning and fare-setting powers for the county's transit systems. NCTD began negotiations with Santa Fe, and in 1990, county voters approved TransNet, a half-cent sales tax to fund transportation projects.

When the system was approved in 1990, the cost was forecasted at $60-$65 million. Planners projected 16,000 daily riders and completion in 2000, and the project's name – SPRINTER – was chosen in a public contest in 1993.

The railroad's financial woes, along with nudging from Congressman Ron Packard finally convinced the Santa Fe to sell 330 miles of Southern California tracks for $500 million in 1992. San Diego's share was $90.5 million for 82 miles shared between the NCTD and San Diego's Metropolitan Transit District for its light rail system. Besides the Escondido Branch, the sale included the coastal tracks where the NCTD has operated its Oceanside to San Diego COASTER commuter trains since 1995. In 1996, Santa Fe and Burlington Northern merged, becoming BNSF. The railroad now has an agreement with NCTD to operate freights on the Escondido Branch during late-night and weekend periods due to the relatively low volume of traffic.

Once the district acquired the right-of-way, it began to consider the rolling stock needed for the service. Project officials investigated the relatively higher cost of diesel multiple unit (DMU) vehicles versus the faster, less expensive light rail vehicles that produced fewer emissions than diesels.

"There was no need to electrify this

system," says Walt Stringer, Manager of Light Rail for the NCTD. "The capital costs would have been way too high for what we're doing. The only advantage of electrification is the system's speeds might be a little faster. However, the line is full of grades and curves and even with a higher performance vehicle, this will still be a relatively slow local service."

SPRINTER Becomes a Marathon

Although the project attracted little opposition between 1987 and 2003, objections surfaced after funding was approved. The NCTD faced lawsuits from residents and the cities of San Marcos and Vista over noise, pedestrian issues and a new loop of tracks to reach the campus of California State University – San Marcos. The legal actions were eventually dismissed. Meanwhile, other local opponents claimed the project was irresponsible since no passenger rail projects produce more revenue than operating costs.

"The message we always had to reinforce that public transit is a public works project," says NCTD Spokesperson Sarah Benson. "Does your library ever make money? Are your freeways making money? No, these are publicly funded projects for the good of the community. "

NCTD received a $152 million full-funding grant agreement from the Federal Transit Administration (FTA) in February 2003, while state and local sources provided investment to match the federal support to build the SPRINTER. The cost, now estimated at $351.5 million, would ultimately reach about $482 million by completion, which was initially planned for a late 2005 launch. As construction moved forward, the NCTD contracted with Siemens AG Transportation Systems in March 2004 for twelve Desiro model DMUs for $53 million, which included production, shipping, import duties and warranty coverage.

Meanwhile, over the project's 25 years, federal and state regulations and permitting requirements had changed dramatically, plus obtaining federal funding took years and there were delays for project approvals, funding and certifications. The SPRINTER was classified first as commuter rail, and today as light rail. "

"We, as an industry, tend to use either light rail or commuter rail because that's our project definition," says Stringer. "During the project's developmental stages, they called it the Oceanside - Escondido commuter rail because that was the historical name of the project and also I think at that time, we had access to certain types of funds – commuter rail funds – whereas light rail didn't necessarily qualify for certain types of funds.

Additionally, buying Siemens' German-made rolling stock set the schedule back. Though popular in Europe, the DMUs weren't yet certified for use in the United States. As a result, the California Public Utilities Commission had to ensure the equipment met American standards. NCTD also had to contend with increases in materials costs, design challenges, weather delays and flooding incidents.

Besides the railcar order, three other major contracts were awarded with a starting value of about $230 million. The most substantial covered trackage, signals, stations and high-level platforms. Another was to build a loop to reach the campus of California State University, San Marcos.

"It did not follow the existing right-of-way," says Stringer. "It had a lot of curvature and a lot of structure, five bridges, and grading and filling because the loop was all new."

Next was the Escondido yard, shop and control center near the Escondido Transit Center, which included centralized traffic control for dispatching and a security monitoring system.

Creating the Oceanside-Escondido Connection

According to he NCTD's contract with BNSF, the railroad needed to continue freight service to its clients along the route even as construction was underway. During the three-year project, freights trains didn't run during the week. Every Friday, crews restored the line for weekend freight service.

"There was a nighttime freight on Friday and Sunday nights," says Stringer. "Except on rare occasions, we always kept the track open for the freight because we have a thriving freight business in Escondido with three customers out there and they couldn't take a lengthy interruption."

At the same time, gaps between the platforms and the DMUs required building retractable bridge plates into the platforms to accommodate the SPRINTER and the slightly wider freight trains. The bridge plates would be raised at night for the freights.

The Desiro DMUs started arriving from Siemens' Krefeld factory near Dusseldorf, Germany in 2006. Shipped via the Panama Canal, they landed at Port Hueneme, California, and then were trucked to Escondido in halves for assembly and testing. The vehicle's sleek aluminum bodies are 135-feet long and can seat 136 with 90 standees. Seating is on two levels with ample room for bikes, wheelchairs, scooters, strollers and surfboards up to 6 feet long. Some of the seats fold up to make room for bikes and strollers. Overhead shelves hold belongings and wide picture windows offer a spacious feel. Coupling two trains increases capacity to more than 450 passengers. The Desiro is environmentally friendly and meets state and federal emissions and regulatory standards.

"So far, the SPRINTER is the only place Siemens has this technology in the U.S.," says Siemens spokesperson Becky Sabin. "It is the right type of technology for those short line railroads to link destination points for passengers."

"There's a rail renaissance that's been going on for the past couple years," says Sabin. "I think it started when gas prices started getting astronomical, and now with the Obama administration's rail – especially through the American Recovery and Reinvestment Act – a lot of smaller areas are looking at light rail or SPRINTER-type lines. We can't build ourselves out of the problem with more roads, especially in California. There's definitely potential for this type of technology. We're eager to showcase this more than just with the SPRINTER, which is one of our proudest projects, and it's such a great complement to the region's rail lines."

SPRINTER's Opening Day Arrives, Finally

SPRINTER's certification from the California Public Utilities Commission was received two days before the revised opening March 9, 2008. More than 100 riders caught the first train at 4:33 a.m. Nearly 13,000 people rode that day along the lengthy 22-mile 15-station line at speeds of up to 55 mph, dipping in and out of rural areas past small farms, skimming by business parks and shops. SPRINTER's route resembles the less mainstream European destinations found on DMU lines like Breil-sur-Roya to Nice-Ville on France's Transport Express Régional. BNSF's freight trains and SPRINTER share the rail line, but at different times; the two modes are never on the line at the same time.

"It's a temporal separation," says Stringer. "That's what allows the freight to run at night, so that's significant. Only a handful of systems that have a Federal Railroad Administration shared-use waiver that we operate under."

On weekdays, SPRINTER runs 64 trips, with a one-way journey taking 53 minutes. Service begins at 4 a.m. and ends at 9:30 pm. All but two stations have parking. The NCTD offers a regional day pass that is valid not only on SPRINTER and the system's buses, but also the San Diego Trolley and MTS bus routes for $5 and $2.25, seniors.

NCTD contracted with Veolia Transportation for SPRINTER's 17 train operators and four fare enforcement officers. Veolia employs about 17,000 workers in the U.S. and Canada.

SPRINTER's on-time performance has been near perfect, and ridership is climbing towards 11,000 day riders SANDAG predicted in 1987. About 7,000 riders travel on SPRINTER on weekdays and another 4,000 ride on weekends.

"It's remained steady," says the NCTD's Benson. "We looked at our bus services that the SPRINTER replaced and we're moving 200 percent more than we ever did on the bus routes."

Riders give SPRINTER high marks for its cleanliness, attractive interiors and comfortable seats. Good insulation masks the diesel engine noise under the passenger compartment so it's a quiet ride. The new continuously welded rail, concrete ties and track bed reduce noise, too.

Nathaniel LeGare, from Vista, a student

at North County's High Tech High School, rides SPRINTER with his bike and calls the train, "a very useful invention so I can go around to more places."

Others echo his sentiments and say the train has cut their travel times up to 45 minutes. Young families are regular SPRINTER riders, along with surfers heading to Oceanside to catch a wave and business travelers connecting to Amtrak's *Pacific Surfliner* to San Diego or Los Angeles.

With three schools nearby, SPRINTER is a magnet for students. Palomar College is among the biggest community colleges in the nation with 30,000 full- and part-time students. California State San Marcos' student population is more than 8,000 and is expected to grow. Mira Costa College connects with SPRINTER via a 10-minute bus ride.

"When you look at an aerial shot of the SPRINTER, it really goes through the heart of all four of the big cities in North County: Oceanside, Vista, San Marcos and Escondido," says Benson. "So it's a great community connector,"

The SPRINTER and Business Development

From its beginnings in 1975, NCTD has come a long way from a small bus operator to providing COASTER commuter rail line and now the SPRINTER. It currently serves around 12 million riders per year on its rail and bus lines, covering over 1,020 square miles.

When planning the SPRINTER, NCTD anticipated many benefits for the region, from linking workers to job centers, increasing mobility, creating jobs and improving air quality to increasing capacity on Highway 78 and upping retail sales. The agency's master plan for its Oceanside and Escondido transit centers includes affordable housing, offices and retail. Oceanside's multimodal center is among the country's busiest with connections to Greyhound, Amtrak, Metrolink, Coaster and NCTD buses. Escondido serves Greyhound and NCTD buses, and a bus rapid transit project is in the works.

"I think what the SPRINTER has done, it's got everybody talking and got people thinking in this mindset now even though nothing necessarily has been built yet," says Benson.

Oceanside is exploring development on land near the Crouch Street station and along the Oceanside Boulevard corridor. In Vista, shopping is close to the SPRINTER, such as Vista Village, which hosts a multiplex theater, retail and eateries.

"Two San Marcos neighborhoods served by SPRINTER are under redevelopment," says Jerry Backoff, Planning Division Director, City of San Marcos. "Both were high-crime areas with dilapidated buildings. Working with nonprofits and for-profits, the Paseo del Oro mixed-use residential and retail project in Richmar have turned the neighborhood around."

Meanwhile, San Marcos has plans for 200-acres of development in the university district. Backoff says they're looking at student housing, retail, office, and hotels adjacent to the Cal State SPRINTER station.

"We're also trying to develop a free shuttle to connect people from these projects to SPRINTER stations," he says.

Palomar Station is a project near

the SPRINTER and NCTD's bus hub at Palomar College. It was approved in 2007, but the current economic challenges have delayed the plan., Plans call for mid-rise buildings with 333 condominiums, retail and offices.

"SANDAG is hosting or sponsoring a corridor land use committee that is actively looking into smart growth opportunities along the corridor, which means that someday we'll see more intense development around the SPRINTER stations," says Stringer.

The Value of Perseverance

Currently as a single-track route, trains can only run at 30 minute frequencies.

"There are three 3.5-mile passing segments," says Stringer. Double-tracking the rail line is a capital investment that's slated, Benson notes, but its timeline is still in development. Stringer adds that double tracking will be expensive because it will require building more bridges and relocating existing signaling.

High costs put original plans on hold for a SPRINTER extension to malls at Escondido's North County Fair and Carlsbad's El Camino Real. The North County Fair line – along all new right-of-way through southern Escondido – is still a possibility, but it's currently not funded or programmed, says Stringer.

"Since SANDAG is considering right now diverting more capital funds to operating expenses to offset California's state budget crunch, any SPRINTER expansion is will be considered in the future," says Stringer. "Plus we're carrying about 7,000 a day. With that level of ridership, we're not having overloading or delays due to overcrowding, so we can act judiciously when it comes to expansions."

A sense of perspective for the new rail line is crucial, according to NCTD's former marketing director Peter Aadland.

"The true measure of the rail line's success will not come overnight. In 10 years, I think the ultimate goal would be for people to say, 'Wow, we're so glad somebody persevered with that train, because we can't imagine our world without it.'"