

California Rails-with-Trails

A Survey of Trails Along Active Rail Lines



SAN FRANCISCO BAY TRAIL (PHOTO: RAILS-TO-TRAILS CONSERVANCY)

Rails-to-Trails Conservancy

Rails-to-Trails Conservancy (RTC) serves as the national voice for more than 100,000 members and supporters. We've help develop more than 15,000 miles of rail-trail throughout the country, and thousands of miles of potential rail-trails waiting to be built. We have supported the tremendous growth and development of rail-trails since opening our doors on February 1, 1986, and we remain dedicated to the creation of a nationwide network of trails and connecting corridors. Further, RTC is committed to enhancing the health of America's environment, transportation, economy, neighborhoods and people—ensuring a better future made possible by trails and the connections they inspire.



NOVEMBER 2009

CONTENTS

Executive Summary	2
Introduction.....	4
Report Findings	
Growth of Rails-with-Trails.....	5
Safety	7
Liability Issues	9
Characteristics of Adjacent Railroads	11
Design Issues.....	11
Trail Funding	12
Additional Resources	12
Appendix— Complete Survey Responses	13

Acknowledgments

This report was funded by the Healthy Transportation Network (HTN), a statewide project that provides training and resources to foster safe bicycle and pedestrian transportation. The HTN is collaboration among five organizations: Rails-to-Trails Conservancy, California Bicycle Coalition, Local Government Commission, California Walks and the Safe and Active Communities Branch of the California Department of Public Health. The HTN is funded by the Transportation Enhancements program administered by Caltrans.

Thanks to our dedicated volunteer Kelly Haberer, who tracked down contacts, assembled the online survey tool, and assisted with interviewing trail managers and following up to get surveys completed. Our deep gratitude goes out to the trail managers who participated by taking time from their busy schedules to help with this project. We also thank RTC’s previous Trail Development Manager Ben Gettleman for his help in getting the project underway.

This report was produced by staff at
Rails-to-Trails Conservancy’s Western Regional Office:

Laura R. Cohen, J.D., Director

Steve Schweigerdt, Trail Development Manager

Rayna Gordon-Hellman, Program Assistant

Executive summary

Every day, thousands of Californians safely use and enjoy trails located along active rail lines. Because these trails offer access to transit, transportation options to important destinations, and recreational and exercise opportunities, rail-with-trail projects are booming in California. Railroads and transit agencies have mixed responses to the trails, but in some cases they have been embraced to increase ridership and reduce trespassing across the tracks. Rail-with-trails projects are a valuable tool to improve the transportation network for bicycles and pedestrians, while at the same time improving access to open space and providing recreation opportunities.



ROSE CANYON BIKE PATH, SAN DIEGO (PHOTO: RAILS-TO-TRAILS CONSERVANCY)

Purpose: This report gives a California-focused update to the November 2000 *Rails-with-Trails* report published by Rails-to-Trails Conservancy. It is intended to help trail project advocates by providing information gleaned from *Rails-with-Trails*, existing projects and specific examples of design. For more general information on rail-with-trail projects, the November 2000 report can give additional case studies and figures from a nationwide perspective. *Rails-with-Trails* is easily accessed on the RTC website:

www.railstotrails.org/resources/documents/resource_docs/Rails-with-trails%20Report%20reprint_1-06_lr.pdf

In 2002, the U.S. Department of Transportation also published an exhaustive report on rail-with-trail projects that includes design, planning and safety guidance. It is available on their website:

www.fhwa.dot.gov/environment/rectrails/rwt/toc.htm

GROWTH: The growth and popularity of rails-with-trails appears to parallel the growth of traditional rail-trails. This report analyzes 21 existing rail-with-trail projects—up from the seven California rails-with-trails that were identified in Rails-to-Trails Conservancy’s 2000 report. At least another five rails-with-trails are being planned.

DUAL BENEFIT: Constructing a trail along an active railroad doubles the value a community derives from the rail corridor and provides citizens with an extra transportation choice. In many places it is difficult to find land on which trails can be built, so using an existing rail corridor can be a good option. In some cases, trails support railways by providing enhanced access for transit riders to stations.

SAFETY: Despite fears that rails-with-trails expose users to greater danger by their proximity to active rail lines, rails-with-trails have been shown to be just as safe as other trails. Our survey of trails found no incidents in California between a trail user and a train. In fact, using a rail-with-trail may well be significantly safer than walking or cycling next to a busy main road, and it may serve to keep people from walking on active rail tracks. Developed trails next to active rail lines funnel trail users to controlled crossing points or new tunnels and bridges across the rail line. Barriers and fences constructed as a part of trail projects can provide separation from the rail lines and discourage trespassing onto the active lines. Designs to reduce potential conflicts are especially important in coastal areas where access across the tracks is highly desirable.

RANGE OF DESIGNS: Rails-with-trails in California are operating successfully under a wide variety of conditions. Some are very close to rail tracks, and others farther away. Some use extensive separating fences or barriers. Some are next to high-speed, high-frequency train services; others are on industrial branch lines or tourist railroads with slower trains operating only a few times per week. Some have at-grade crossings while others use underpasses or overpasses. These successful projects shared two common threads; the involvement of stakeholders and the railroad throughout the process, and designing to maximize safety and function.



SOLANA BEACH COASTAL RAIL TRAIL (PHOTO: STEPHAN VANCE, SANDAG)

RAILROADS: Railroad companies are understandably cautious of such projects, and the majority of trail managers reported that adjacent railroads had mixed feelings or did not initially want to discuss the possibility of a trail along the active line. However, 25 percent of the responding trail managers described the attitude of the railroad involved with their trail as supportive, positive or good.

LIABILITY: The survey revealed the vast majority of rails-with-trails are insured by existing city or transit district insurance coverage in a similar manner to other trails. An increasing number of railroad companies are requiring trail managers to indemnify them against liability. The report found one claim made against trail managing agencies due to increased noise of train horns blowing at new at-grade crossings. According to the survey results, no claims were made against railroad companies.

Introduction

California offers a wonderful climate, a growing public transit system and a variety of urban and town centers that make trails along active rail corridors an excellent option for commuting, transit access and recreation. Rail corridors can be attractive sites for trails because they often provide a direct connection between popular community locations, such as downtown districts and residential areas. At a time when demand for trails is increasing, finding land for them can be difficult. Placing trails alongside active rail corridors can be an excellent method of securing land for safe, popular and effective trail development.

Rails-with-trails are multi-use trails along rail lines that are still active. In recognition of the growing popularity and use of rails-with-trails, this report presents findings gathered from a survey and interviews of managers of 18 California rails-with-trails. An additional three rails-with-trails were included with partial data that will be completed when the trail managers give additional information. Our intention is to provide all stakeholders considering rails-with-trails projects with information so that decisions are based as much as possible on objective facts. (The detailed answers from the surveys can be found in the Appendix.)

Who can use this report?

This report is designed to be of assistance primarily to trail planners, advocates and managers. By clearly laying out the California rails-with-trails experience, the report is designed to help answer questions such as:

- Are rails-with-trails safe?
- Will a rail-with-trail work in our community?
- How do we design our rail-with-trail to make it safe and effective?
- How can we work cooperatively with a railroad company?
- How do we handle liability issues?
- Who has experience with different aspects of rails-with-trails?



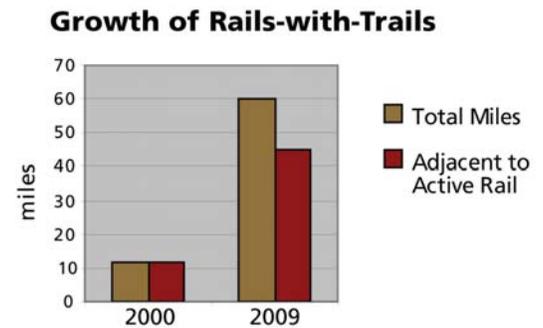
MANTECA TIDEWATER BIKEWAY (PHOTO: RAILS-TO-TRAILS CONSERVANCY)

The report can also be useful to the railway industry, elected officials, federal, state and local transport officials, consultants, planning departments and anyone interested in the rail-with-trail concept.

Growth of Rails-with-Trails

California came late to the rail-trail movement, but momentum is building rapidly to build a network of trails that helps the population access public transit and find recreational opportunities in urban areas.

There are currently at least 21 open rails-with-trails with 60 miles of trail, up from seven rail-with-trails and 11.4 miles of trail in 2000, a fivefold increase in mileage. At least five more rails-with-trails are known to be in various stages of development, with major projects such as the Coastal and Inland Rail Trails in San Diego County, the Coastal Rail Trail in Santa Cruz County, and the SMART corridor in Sonoma and Marin proposed to add considerable mileage to trail networks in those areas. Not all rails-with-trails run along active rail lines for their total length. Of the 60 miles of rails-with-trails in California, 45 miles lie adjacent to an active line.



Rails-with-trails appear to be as popular as any other type of multi-use trail. The eight rails-with-trails with usage estimates reported a total annual patronage of 406,000 visits.

Interestingly, the longest rail-with-trail is actually adjacent to a bus rapid transit line that operates similar to light rail. Because the characteristics of the busway are similar to a rail line, we chose to include the information in this report.

Rails-with-trails projects vary greatly in length, separation from the rail line and usage, just as the active rail lines they parallel vary greatly in traffic and speed.

Dual benefit



SOLANA BEACH COASTAL RAIL TRAIL (PHOTO: CITY OF SOLANA BEACH)

Once constructed, rails-with-trails offer similar benefits to trail users and the general community as other types of trails. They are safe places for walking, jogging, cycling and other forms of recreation or human-powered travel, and they provide recreation, commuter and utility links between and within communities. In California coastal communities, they can attract tourist use and steer those seeking beach access to controlled crossing points. Rails-with-trails also make efficient use of rail corridors by providing more transportation choices for the community. In many places, particularly urbanized areas, it is increasingly difficult to create a contiguous corridor on which trails can be built, so utilizing an existing rail line can be the best option.

For example, the 2.5-mile Folsom Parkway Trail in Folsom was developed with the specific goal of making the best use of the existing transport corridor. The trail is helping to boost rail ridership as train commuters use the trail to cycle or walk to the stations for their commute to Sacramento. The trail project also reduced costs for the rail construction by helping fund relocation of an existing gas line, and the transit district included the trail in their construction of the Glenn Road station.



ROSE CANYON BIKE PATH, SAN DIEGO (PHOTO: RAILS-TO-TRAILS CONSERVANCY)

Logical Links

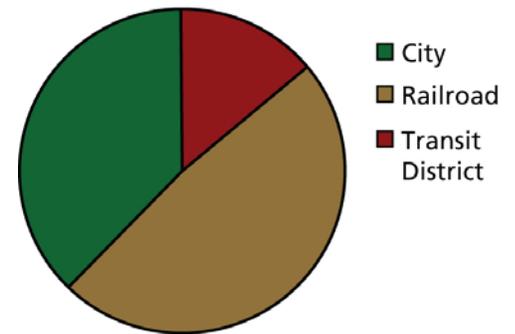
Rail corridors were developed to form links between many of the places that cyclists, walkers and other trail users want to go. These include links between downtowns and residential areas, often running along attractive waterfronts or serving historical tourist destinations.

Just like unused train lines, active lines have bridges and culverts designed to help trains avoid at-grade road crossings. Trails can sometimes take advantage of these, improving the safety for trail users by keeping them away from road crossings and making the trail route smoother, more direct and attractive.

Land Ownership

Because the rail lines adjacent to rails-with-trails have various uses, the ownership of the corridors also varies. Three corridors are owned by cities, eight by transit districts for commuter rail, light rail or bus rapid transit, and 10 are owned by railroad companies. Most city-owned corridors are used for excursion trains.

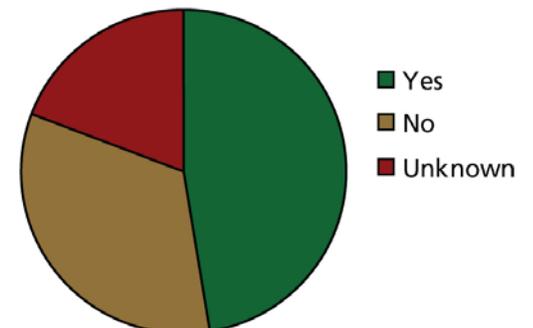
Corridor Ownership



Easements

The survey showed that 10 of the rails-with-trails projects were granted an easement from the corridor owner. Seven did not need an easement, either because the corridor owner also manages the trail or because the trail is just outside the railroad property on an adjacent right-of-way. The San Clemente Pedestrian Beach Trail did not get an easement but did enter into a license agreement similar to a lease with the State Lands Commission. Easement information was unknown for four of the trails.

Easement Required



Safety

Safety is the most important aspect of developing any rail-trail, whether along an operating railroad or not. The good news is that rails-with-trails have been shown to be just as safe as other trails. Every day, thousands of people across the United States safely use existing rails-with-trails. Fears that more trail users would be severely injured due to the proximity of moving trains have never been realized.

Understanding the Railroad

It is not surprising that railroads are so concerned about safety and liability. The rail industry is strongly committed to improving the safety of its operations and to keeping people off railroad tracks. It spends millions of dollars each year on this effort through Operation Lifesaver and other campaigns.

Apart from the obvious desire to preserve life, the rail industry is concerned with the trauma that train incidents can cause to train drivers and other staff, the possibility of vandalism of railroad property which may be expensive to repair or create a threat to safety, and the threat of litigation.

Trails are sometimes seen as attracting additional people and problems to the corridor, directly conflicting with railroad maintenance, operations and safety.



SAN CLEMENTE PEDESTRIAN BEACH TRAIL (PHOTO: RAILS-TO-TRAILS CONSERVANCY)

Train-Trail User Conflicts

California trail managers reported that no incidents with trains and trail users have occurred on rails-with-trails. Previous nationwide studies in 2000, 2002 and 2005 found two incidents that were not directly trail related, but did occur near rail-with-trail projects. A bicyclist was injured in Illinois on an adjacent preexisting road/rail crossing when the bicyclist ignored warning bells and flashing lights and rode around a lowered crossing gate. Another injury occurred in Alaska when a young person crossed a trail from a residential area to “hop” a slow-moving train. No other trail-related train accidents have been reported nationwide.

Contrast the absence of conflicts on rail-with-trail corridors to injuries and deaths sustained on rail corridors without active trails. The 2002 U.S. Department of Transportation and Alta Planning *Rails-with-Trails: Lessons Learned* study reported that from 1995 to 2002 the number of trespass fatalities had reached approximately 500 per year, exceeding highway-rail crossing deaths. Per the report, “trespasser fatalities represent the greatest loss of life associated with railroad operations.”

Rails-with-trails projects have the potential to reduce train and trail user conflicts by guiding trail users to controlled crossings and designated access points. For example, in the case of the new San Clemente Pedestrian Beach Trail, the railroad operator sees the trail as a safety improvement after initially having concerns. The trail constructed a tunnel under the tracks at one of the points that had the most pedestrian traffic, but planners also added new at-grade crossings. San Clemente reported that there were incidents prior to the trail construction, but none since. Similarly, the San Luis Obispo Railroad Safety Trail provided a new pedestrian and bicycle bridge over the active rail line where trespassing was common and constructed fences in the vicinity to funnel trail users to the bridge.

There were several incidents unrelated to the trail reported on the Metro Orange Line busway where cars ran red lights and collided with the bus rapid transit vehicles used on the Orange Line. Details can be found in an *LA Times* article: <http://articles.latimes.com/2005/nov/03/local/me-orange3>. For cyclists using the bikeway, the survey found that measures were taken to warn riders of intersections through a striping plan, “Signal Ahead” signs, and curves in the path to slow riders and lead them to wheelchair ramps for crossing.

Relative Safety of Road and Rail

Opponents of rails-with-trails have said that introducing people to active railroad corridors will reduce the safety of the corridor. However, questions on the safety of active railroad corridors are only relevant in comparison with existing bicycle and pedestrian safety on roadways and with current incident levels on rail lines without adjacent trails.

Rails-with-trails can be safer than trails next to roads. “In the last 15 years, more than 76,000 Americans have been killed while crossing or walking along a street in their community,” according to the 2009 *Dangerous by Design* report by Transportation for America and the Surface Transportation Policy Partnership. Trails separated from roads can provide a safer option. Even with an active rail line near the trail, the exposure from a track carrying ten to twenty trains per day is much less than a road carrying thousands of vehicles per day.

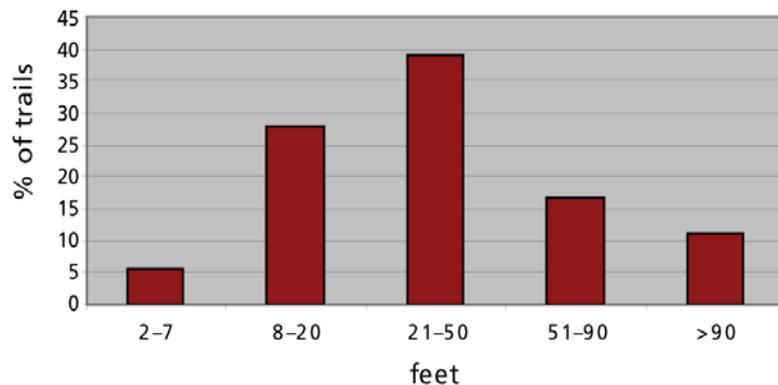
Safe designs

Trail managers can do a great deal to ensure that their trail is designed, operated and maintained to be as safe as possible. Each of the trail managers surveyed for this study faced a variety of safety challenges that they have solved.

Key safety design factors include:

- Providing adequate distance between track and trail. The separation between track and trail varied widely and averaged 45 feet. Measurements are from the centerline of the track to the nearest edge of the trail. Trail planners strive to maximize the setbacks of the trail from the track, but in some cases geography and right of way limit the available space. The San Clemente Beach trail, Folsom Parkway, Sacramento River Parkway, Inland Rail Trail, Santa Maria Valley Railroad trail, and Martin Luther King Promenade all have segments that are within 20 feet of the track centerline.
- Providing safe fencing, barriers or grade separation between track and trail where necessary. The survey found 15 of the 21 rails-with-trails have installed some kind of barrier between the rails and the trail. Barriers used include vegetation, grade separation, fences, ditches and cement walls. Crossings are at-grade, tunnels or overpasses. Four trails did not have a barrier, and two did not have information.
- Designing safe rail crossings, and creating enough of them at convenient locations to serve local uses.
- Installing adequate trail-user warning signs.

Distance Between Track and Trail



Liability Issues

While liability is a vitally important issue, building a trail along an active railroad does not, in itself, expose the trail manager to unacceptable risk of liability. In other words, the concept of rails-with-trails is not an inherently negligent design. As is the case with most trails, public trail managers and private landowners have some liability protection in many states due to recreational use statutes. These statutes reduce the liability of landowners and managers who provide free public access on their land for recreational uses such as trails.

Railroads have, for many years, had some protection against liability for injuries on their tracks due to the impracticality of fencing many thousands of miles of railway, some of which have been in place for more than a century. However, railroads are naturally interested in keeping their liability to a minimum. In some cases the mere threat of possible legal action, and the amount of the railroad's time and effort that may be needed to resolve even frivolous suits, will be enough to deter rail companies—particularly small companies—from involvement in rail-with-trail.

Insurance Policies

All of the trail managers responded that the trails are covered by existing insurance policies that cover the city, open space or transit entity that operates the trail.

Claims Against Trail Managers

Of the 18 trail managers interviewed for this report, one has a current claim, but it is not safety related. San Clemente is dealing with a current claim from homeowners regarding train horn noise due to the new at-grade pedestrian crossings constructed as a part of the trail project. The city is testing “wayside horns” and a Safety/Quiet Zone as possible solutions to reduce the noise and settle the claim.



SAN CLEMENTE PEDESTRIAN BEACH TRAIL (PHOTO: RAILS-TO-TRAILS CONSERVANCY)

Indemnification

Indemnification of the railroad in California rail-with-trail projects varied greatly. In many cases, the trail manager did not know if they were required to indemnify the railroad, or it was not applicable because the trail is outside the rail right-of-way (such as in an adjacent road right-of-way owned by the city). Most trails that were actually in the rail right-of-way were required to indemnify the railroad, with the exception of Folsom Parkway and the city-owned Sacramento River Parkway. Of the eight trails studied where indemnification would be applicable, seven (88 percent) were required to release the corridor's owner from liability for incidents on the trail. This percentage is an increase from previous nationwide studies which had figures of 17 percent of trails in 1996 and 26 percent in 2000.

This result may be because the trails studied previously were those that were easiest for the trail managers to develop, or because rail operators are becoming more concerned about their liability. Trail managers will need to negotiate the indemnity with the railroad as a part of the trail development process. Offering to incorporate the trail into the city, county or state umbrella policy can be an effective way to alleviate railways' liability concerns.

Risk Management

The key to minimizing exposure to liability for rails-with-trails is the same as for other types of trails. The trail should be designed by professionals to accepted state and national standards, and the trail must be systematically maintained and managed with clear, well-documented records.

The manager of any trail, especially a rail-with-trail, should obtain legal advice on their exposure to liability.

The three main types of scenarios likely to expose trail managers to potential liability are:

- Injuries caused by trail defects;
- Injuries caused by conditions on adjacent property including the active railroad;
- Injuries resulting from conflicts among users or where a trail crosses a road or railroad track.

Special care should be taken to ensure that crossings are properly designed with the correct signage and that any barriers designed to improve safety are well-maintained. (See the AASHTO Guide for the Design of Bicycle Facilities.)

Working with Railroads

The California survey shows that while railroad operators are concerned about any proposal that might bring more people into contact with their rail lines, many also are supportive of the concept of rail-with-trail, as well as the benefits trails can bring to the community and the railroad company.

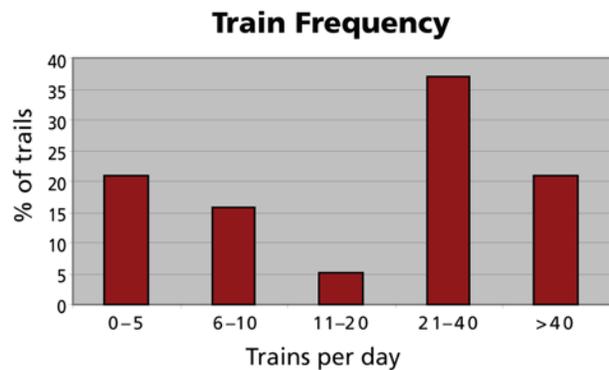
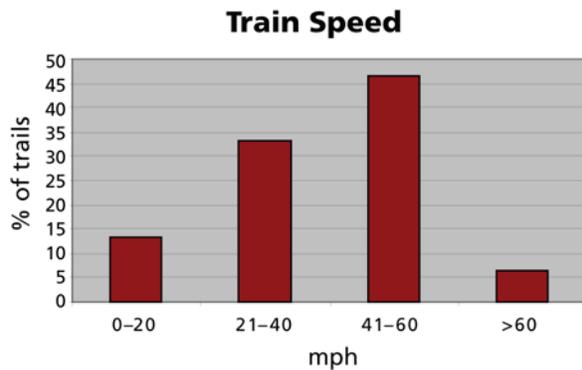


MARTIN LUTHER KING, JR PROMENADE (BOYD LOVING)

When developing a rail-with-trail, including both parallel rail lines and rail crossings, trail developers must consider the safety of trail users with respect to active rail lines. Trail managers should bring key stakeholders—including the railroad operator, railroad customers, government leaders and trail users—together early in the trail-development process. Coordinating efforts guided by best practices as outlined by the Federal Highway Administration’s rails-with-trails study will ensure that safety elements are an integral part of the trail’s master plan.

Characteristics of Adjacent Railroads

Rails-with-trails run along a wide variety of active rail lines with different speeds, frequency and types of trains, ranging from bus rapid transit to slower-speed excursion trains to high-speed transit and freight trains. The charts below reflect this variability in the percentages of trails next to the types of rail traffic.



Design Issues

Trail managers noted several aspects of the trail designs that drastically increased maintenance costs or had to be replaced within a few years of the trails opening.

The city of Carlsbad included bollard lights along their trail that have become a target of repeated vandalism. The three-foot-tall bollard lights are just off the asphalt trail in a two-foot-wide decomposed granite area. The lights have repeatedly been hit with baseball bats and have caused most of the \$80,000 to \$90,000 costs of maintenance that the city is absorbing. The railroad operator would not allow taller lights, fearing they would distract the train engineers. For future phases the city will request taller lighting with shielding to prevent any light issues for the railroad operator.



SOLANA BEACH COASTAL RAIL TRAIL (CITY OF SOLANA BEACH)

Carlsbad also has recurring issues with people cutting through the new welded-wire fence in areas where they were accustomed to crossing the tracks for beach access. The illegal crossings have caused increased tension with the railroad operator.

In another case, the Metro Orange Line in Los Angeles was originally landscaped with dense greenery and shrubs, which led to transient use, vandalism and complaints from neighbors. The landscaping was then changed out and is now being routinely maintained by a subcontractor.

The Metro Orange Line in Los Angeles also faced safety concerns with bicycle speeds at street crossings. They solved the problem with a slurve, where the bike path encounters a sharp curve and diagonal curb cut at

the crossing. This design reduces the speed of the approaching bicyclists, forcing them to acknowledge the traffic signals and making them more visible to cars. A short film spotlighting the trail can be found at: www.streetfilms.org/archives/las-orange-line-bus-rapid-transit-plus-bike-path/

Most of the trails cited additional permitting and environmental issues that needed to be worked through, in some cases with the Public Utilities Commission, before the trail could be developed. These extra steps were especially common along the coast, where rail lines run across inlets, lagoons and rare habitat areas.

Trail Funding

Similar to other transportation projects, trail funding is a long and complex process. Rails-with-trails projects use a variety of sources to fund planning and construction, including government and private sources. Half of the trails surveyed used multiple sources of funding, with seven using federal, state and local sources. Many jurisdictions in California have passed local sales tax measures to raise transportation funds that are used to match state and federal transportation and parks grants. These projects may include new grade-separated crossing of the rail tracks, new bridges, environmental mitigation measures and complicated engineering solutions that tend to be more expensive than local funds can support independently. Three of the surveyed trails were built with only local funding sources; these are commonly conditioned as a part of an adjacent development project or funded through impact fees.

Maintenance funding came exclusively through the cities in which the trails are located, and funding levels varied wildly depending on the landscaping and amenities that are offered along the corridor. When new trails are planned, a thorough maintenance plan and funding sources should be prepared to ensure that the trails are safe, attractive and useful additions to the communities they serve.

Additional Resources

"Rails-with-Trails: Design, Management, and Operating Characteristics of 61 Trails Along Active Rail Lines" (Rails-to-Trails Conservancy, 2000).

www.railstotrails.org/resources/documents/resource_docs/Rails-with-trails%20Report%20reprint_1-06_lr.pdf

"Rails-with-trails: Lessons Learned" (U.S. Department of Transportation and Alta Planning, 2002).

www.fhwa.dot.gov/environment/rectrails/rwt/toc.htm

"Rails-with-trails: A Preliminary Assessment of Safety and Grade Crossings" (Rails-to-Trails Conservancy, 2005).

www.railstotrails.org/resources/documents/resource_docs/RwT_Grade_Crossings_Report_final_lr.pdf

"Guide for the Development of Bicycle Facilities" (American Association of State Highway and Transportation Officials, 1999).

http://safety.fhwa.dot.gov/ped_bike/docs/b_aashtobik.pdf

"Manual on Uniform Traffic Control Devices" (U.S. Department of Transportation, 2003).

<http://mutcd.fhwa.dot.gov/>

APPENDIX

Survey Responses from 21 California Rail-with-Trail Projects

Trail Name	County and State where trail is located.	What is the length of the trail? (mi)	What is the length immediately adjacent to the rail corridor? (mi)	Land type?	How was your trail funded?	Who owns the rail corridor?	What were the main stumbling blocks to creating the trail and have all the issues been resolved?	Please describe any regulatory or permitting issues your agency faced.
Fillmore Railroad Trail	Ventura County, Calif.	1.4	1.4	Urban, Suburban	State funds (taxes, grants, etc)	In fee by city of Ventura from Southern Pacific and Ventura Transportation Commission	Conflicts with rail owner and issues with wood rail fence	Trail crossings involved working with PUC for permits
San Clemente Pedestrian Beach Trail	Orange County, Calif.	2.3	2.3	Suburban	Local, State, Federal, Private funds	Orange County Transit Authority; Southern California Regional Rail Authority	Acceptance of project by rail owner/operator —fear trail would be safety risk (now view trail as a safety improvement!); Required a settlement agreement (San Clemente to make a summary of the agreement available)	Settlement agreement with rail authority and PUC took awhile to achieve; then work with environmental agencies was slow but went well
Hoover Bike Path	Orange County, Calif.	2	2	Suburban	Local funds (city, county, transit authority, etc)	Union Pacific and US Navy	Unknown	Unknown
Atchison, Topeka and Santa Fe Trail (aka Walnut Trail)	Orange County, Calif.	3.3	3.3	Suburban	Local funds (city, county, transit authority, etc), State funds	BNSF	The trail is now located within the railway right of way; however, portion(s) of the trail are located within Southern California Edison right of way. An easement agreement was established between SCE and the City of Irvine making the trail possible.	
Manteca Tidewater Bikeway	San Joaquin County, Calif.	3.4	1	Suburban	Local, State, Federal funds	Union Pacific Railroad	The primary issue on the segment that is adjacent to the track area, was providing an adequate buffer to satisfy the railroad. The issue has been resolved.	
Metro Orange Line Bikeway	Los Angeles, Calif.	14	9	Urban	Local, State, Federal funds	Los Angeles County Metropolitan Transportation Authority	Project started in early 90's. When the transit solution became a busway, the design/build got complicated and contractor selected was not familiar with this type of project. Crossings, signalization were problems. Crossings due to traffic, signals due to preemption. Cost of moving detectors. Sequencing of what gets built when. The crossing problem was solved by having bike path lead user to wheel chair ramp in a "slurve" which slows down the bicyclist so they can be seen. (Note there is a video on the Web of this path.)	
Martin Luther King Promenade	San Diego, Calif.	1.1	1.1	Urban	Local funds (city, county, transit authority, etc), Federal TE funds	Southern Pacific	Rail and trail have narrow incisions and rail road company was concerned about risk.	City permits

Trail Name	County and State where trail is located?	What is the length of the trail? (mi)	What is the length immediately adjacent to the rail corridor? (mi)	Land type?	How was your trail funded?	Who owns the rail corridor?	What were the main stumbling blocks to creating the trail and have all the issues been resolved?	Please describe any regulatory or permitting issues your agency faced.
Rose Creek to Mission Bay Bike Path	San Diego, Calif.	3.8	1.1	Urban	State funds (taxes, grants, etc)	San Diego Metropolitan Transit Development Board	Unknown—Before my time	
Watts Towers Crescent Greenway	Los Angeles, Calif.	0.2	0.2	Urban	Federal funds (ISTEA, etc)	Los Angeles County Metropolitan Transportation Authority		
Escondido Segment Inland Bike Trail	San Diego, Calif.	2.27	2.27	Urban	Local, State, Federal funds	North County Transit District	None	None
Santa Clara River Trail	Los Angeles, Calif.	8	4		75% Private fees, 25% State funds	City of Santa Clarita		
Folsom Parkway	Sacramento, Calif.	2.5	2.5	Urban	Local and State funds	Regional Transit Authority		
San Luis Obispo Railroad Safety Trail	San Luis Obispo, Calif.	1.5	1.5	Urban	Local, State, Federal funds and developer fees	Union Pacific	Negotiations with UP which are still in progress since 1.5 miles is built and remaining 3 under construction	None
Santa Maria Valley Railroad Trail	Santa Barbara, Calif.	0.23	0.23	Urban	Federal funds (ISTEA, etc)	Santa Maria Valley Railroad	ROW acquisition (easement)	Phase II required for NEPA docs
Sacramento River Parkway Trail	Sacramento, Calif.	4	2.5	Urban	State funds (taxes, grants, etc)	City of Sacramento	Unknown	Unknown
Coastal Rail Trail	Solana Beach, San Diego, Calif.	1.7	1.7	Urban	Local, State, Federal funds	North County Transit District	worked with SANDAG	
Coastal Rail Trail	Oceanside, San Diego, CA	1	1	Urban	State, Federal funds	North County Transit District	worked with SANDAG	
Coastal Rail Trail	Carlsbad, San Diego, Calif.	0.7	0.7	Urban	Local, State, Federal funds	North County Transit District	worked with SANDAG	Bridge over lagoon—US Coast Guard permit required. Habitat issues
San Francisco Bay Trail, Pinole Shores/Hercules	Hercules, Contra Costa, Calif.	2.13	2.13	Suburban	Local funds—adjacent development	Union Pacific, trail outside ROW		Environmental/Habitat issues
Alton Bike Trail	Orange County, Calif.	1.8	1.8	Urban		Union Pacific, trail outside ROW		
Old Highway 40 Bike Path	Davis, Yolo County, Calif.	3	3	Suburban		Union Pacific, trail outside ROW		

Trail Name	What railroad(s) operates on the corridor?	Was an easement obtained for the trail?	If an easement was obtained, from whom?	How would you characterize the working relationship between the railroad and the trail management agency?	Who maintains the trail?	Who pays for the maintenance?	What is the approximate annual cost of maintenance?	Who patrols the trail and under what arrangement/contract?
Fillmore Railroad Trail	Ventura Transportation Commission, Fillmore and Western Rail Co.	Yes	Ventura Transportation Commission	Positive/cooperative	City of Ventura	City of Ventura, with bike path maintenance monies	\$1,001 to \$10,000	Ventura Police—trail drivable by their vehicles, there are no gates, use bollards. Very successful.
San Clemente Pedestrian Beach Trail	Southern California Regional Rail Authority (Metrolink), Amtrak, BNSF	No	No easement, but a license agreement (similar to a lease) with OCTA (rail corridor owner) and State Lands Commission for several of the crossings.	Positive/cooperative	City of San Clemente	City of San Clemente	\$150,000	City of San Clemente contracts with Orange County Sheriffs Beach Patrol Unit
Hoover Bike Path	Union Pacific	No		Positive/cooperative	City	city	Over \$30,000	Unknown
Atchison, Topeka and Santa Fe Trail (aka Walnut Trail)	Amtrak, Metrolink, and BNSF freight services.	Yes	Southern California Edison	Unknown	City of Irvine		Not applicable	
Manteca Tidewater Bikeway	Union Pacific Railroad	Yes	Union Pacific	Positive/cooperative	City of Manteca Park Maintenance Staff	City of Manteca	Over \$30,000	City staff
Metro Orange Line Bikeway	buses; was an unused railway	No	There is an agreement with the transit agency.	Unknown	City of LA	City of LA	Over \$30,000	Note that cost is \$200–300K for maintenance. Original plan was for patrols to be by Rec and Park but now contracted out due to internal city issues.
Martin Luther King Promenade	Southern Pacific freight and Coaster passenger	Yes	Southern Pacific	Mixed	City of San Diego	City of San Diego	Not applicable	City of San Diego Police and rail officials
Rose Creek to Mission Bay Bike path	Commuter Rail (Coaster), Amtrak, all freights			Mixed	City of San Diego		Not applicable	San Diego Police Department

Trail Name	What railroad(s) operates on the corridor?	Was an easement obtained for the trail?	If an easement was obtained, from whom?	How would you characterize the working relationship between the railroad and the trail management agency?	Who maintains the trail?	Who pays for the maintenance?	What is the approximate annual cost of maintenance?	Who patrols the trail and under what arrangement/contract?
Watts Towers Crescent Greenway	Los Angeles County Metropolitan Transportation Authority	No			Los Angeles County Metropolitan Transportation Authority			
Escondido Segment Inland Bike Trail	Commuter Rail (Sprinter), freight	No		Unknown	Disputed—City will probably maintain	City of Escondido		Bicycle cops, reduced due to budget cuts
Santa Clara River Trail	Los Angeles County Metropolitan Transportation Authority			Cooperative	City of Santa Clarita	City of Santa Clarita	\$6,000/mile	City Maintenance Staff
Folsom Parkway	Regional Transit Authority Gold Light Rail line	Yes	Regional Transit Authority	Positive—RT worked to integrate trail at Glenn Dr. station	City of Folsom	City of Folsom	\$2,000/mile	City Police, occasional motorcycle patrol
San Luis Obispo Railroad Safety Trail	Union Pacific	Yes, for some of the landscaping but trail is on land city bought from SP before SP sold the rail line to UP	Union Pacific	Mixed—positive with local UP but difficult with UP headquarters in Omaha	City of San Luis Obispo	City of San Luis Obispo	\$15,000 per mile	City of San Luis Obispo
Santa Maria Valley Railroad Trail	Santa Maria Valley Railroad	Yes	Santa Maria Valley Railroad	Railroad didn't understand the concept at first, but after education were open to it	City of Santa Maria	City of Santa Maria	\$50,000 per mile	City Police can see trail through fence
Sacramento River Parkway Trail	California State Railroad Museum Sacramento Southern Railroad	No	When land is traded to State Parks, City will get easement	Railroad wants to be left alone	City of Sacramento Parks Department	City of Sacramento	\$1400 per mile	City Park Ranger—City Employees
Coastal Rail Trail-Solana Beach	Coaster, Amtrak	Yes	Transit District		City of Solana Beach	City of Solana Beach		
Coastal Rail Trail	Coaster, Amtrak, Freight	No, not in corridor		Negative. RR doesn't like bikes	City of Oceanside	City of Oceanside	\$1000 per mile	

Trail Name	What railroad(s) operates on the corridor?	Was an easement obtained for the trail?	If an easement was obtained, from whom?	How would you characterize the working relationship between the railroad and the trail management agency?	Who maintains the trail?	Who pays for the maintenance?	What is the approximate annual cost of maintenance?	Who patrols the trail and under what arrangement/contract?
Coastal Rail Trail-Carlsbad	Coaster, Amtrak, Freight	Yes	Transit District	Negative—RR dislikes people cutting through fence to access beach	City of Carlsbad	City of Carlsbad	\$80–90k per year, primarily due to vandalism of lights	City police, requested additional patrols due to vandalism
San Francisco Bay Trail, Pinole Shores/Hercules Area	Amtrak Capitol Corridor, Union Pacific freight	Yes	City or private property	RR ambivalent toward trail, generally negative toward trails near tracks	East Bay Regional Parks, City of Hercules	East Bay Regional Parks, City of Hercules		
Alton Bike Trail								
Old Highway 40 Bike Path								

Trail Name	Has your agency dealt with any complaints from adjacent landowners?	Please describe the effect (positive or negative) of the trail on community attitudes toward the railroad operator.	Is there a barrier separating the tracks and the trail?	Separation between trail and tracks	If there is a barrier, please briefly describe the type(s) and their length (for example, vegetation, grade separation, ditch, fence, wall, etc.).	Are there any conflicts between trail and rail expansion, such as construction of new tracks or other issues?	Has the trail agency contributed to the stability of the rail line, such as the trail construction helping with the costs of rail infrastructure, or in any other way?
Fillmore Railroad Trail	No	No effect	Yes	33 ft.	Wood rail fence	No	Yes, work with rail line on rail crossings, every 2 years
San Clemente Pedestrian Beach Trail	Yes	Adjacent landowner complaints were about train horns blowing more frequently for pedestrian grade crossings. Community happier that there is no barbed wire in place by the rail.	Yes	15–30ft	See-through cable fence 4 ft. high with fake wood posts every 8 ft. Steel cables every 4 inches. A barrier that you can see through.	No	City does not help with costs of rail infrastructure but pays 100% of trail maintenance.
Hoover Bike Path	No	Not aware of any positive or negative attitudes from the public regarding the railroad operator.	Yes	50 ft.	There are oleanders that separate the trail from the railroad. The oleanders extend from Garden Grove Blvd to Hazard Avenue with an approximate height of 8-10 feet.	Unknown	Unknown

Trail Name	Has your agency dealt with any complaints from adjacent landowners?	Please describe the effect (positive or negative) of the trail on community attitudes toward the railroad operator.	Is there a barrier separating the tracks and the trail?	Separation between trail and tracks	If there is a barrier, please briefly describe the type(s) and their length (for example, vegetation, grade separation, ditch, fence, wall, etc.).	Are there any conflicts between trail and rail expansion, such as construction of new tracks or other issues?	Has the trail agency contributed to the stability of the rail line, such as the trail construction helping with the costs of rail infrastructure, or in any other way?
Atchison, Topeka and Santa Fe Trail (aka Walnut Trail)	Unknown		Yes	40—200 feet	On certain portions, there is vegetation which separates the trail and railway.	Unknown	
Manteca Tidewater Bikeway	Yes	The majority of the trail runs through a corridor that is approximately 80-100 feet wide, that backs up to privately owned homes. This area was an abandoned by the Tidewater Southern Railway. Initially there was some negativity to building the trail behind their homes. But since that time, it has been a very positive attribute for the City and is used quite a bit.	No	50 feet		No	No
Metro Orange Line Bikeway	Yes	First landscaping approach was faulty...too many shrubs, too lush and this led to transient encampments /vandalism and complaints from neighbors Landscaping has been changed and improved situation, but the ongoing maintenance will be done under a contract to be awarded in Oct. 2009 and maintenance should become more routine and acceptable.	Yes		Fence	Yes	
Martin Luther King Promenade	No		Yes	16 feet	Fence with ornamental steel rails between waist and chest height	Yes	No contribution to rail infrastructure costs but private monies from Convention Center have improved appearance of trail
Rose Creek to Mission Bay Bike path	Unknown		No	100 feet	Vegetation, grade separation	Unknown	
Watts Towers Crescent Greenway			Yes	20 feet	Steel picket fence		

Trail Name	Has your agency dealt with any complaints from adjacent landowners?	Please describe the effect (positive or negative) of the trail on community attitudes toward the railroad operator.	Is there a barrier separating the tracks and the trail?	Separation between trail and tracks	If there is a barrier, please briefly describe the type(s) and their length (for example, vegetation, grade separation, ditch, fence, wall, etc.).	Are there any conflicts between trail and rail expansion, such as construction of new tracks or other issues?	Has the trail agency contributed to the stability of the rail line, such as the trail construction helping with the costs of rail infrastructure, or in any other way?
Escondido Segment Inland Bike Trail	No		Yes	7 feet	6-foot chain link fence	No	Built stations and trail together at same time
Santa Clara River Trail		Generally positive	Yes	15+feet	Fencing, vegetation		
Folsom Parkway	No	Positive—improved access to light rail, nearby employees walk on trail	No	40 feet	N/A	Possible future conflicts with double tracking, should be able to work through them	RT assisted in construction at Glenn Dr. Trail assisted in relocating gas line
San Luis Obispo Railroad Safety Trail	No	Community does not understand the concerns of the rail line owner concerning their property	Yes	60 feet	UP required a 7-foot steel fence between rail line and trail	UP wants to have the ability to lay a second track in the future; this has been an issue	Trail agency has helped with costs of a pre-emption at trail crossing and is paying for a safety campaign around trespassing on rail tracks—a long-standing problem
Santa Maria Valley Railroad Trail	No	Positive	Yes	10 feet	6-foot chain link fence	No	Trail construction paid for fence
Sacramento River Parkway Trail	No	N/A	No	Adjacent—10 feet	N/A	No	No
Coastal Rail Trail-Solana Beach	No		Yes	30–60 feet	Grade separation, chain link fence at top	No	No
Coastal Rail Trail-Oceanside	Some had to be moved for ROW infringement		Yes	100 feet	6-foot chain link fence, some areas grade separated	No	No

Trail Name	Has your agency dealt with any complaints from adjacent landowners?	Please describe the effect (positive or negative) of the trail on community attitudes toward the railroad operator.	Is there a barrier separating the tracks and the trail?	Separation between trail and tracks	If there is a barrier, please briefly describe the type(s) and their length (for example, vegetation, grade separation, ditch, fence, wall, etc.).	Are there any conflicts between trail and rail expansion, such as construction of new tracks or other issues?	Has the trail agency contributed to the stability of the rail line, such as the trail construction helping with the costs of rail infrastructure, or in any other way?
Coastal Rail Trail-Carlsbadl	Complaints due to vandalism, graffiti, homeless	Negative	Yes	75 feet	7-foot welded wire fence, 8-foot tube steel fence, landscape planters	Yes—NCTD is double tracking and adding 3rd track at stations. Challenge to design future trail phases.	No
San Francisco Bay Trail, Pinole Shores/Hercules Area	Park rangers		Yes	50 feet	Chain link fence, some area grade separated	Yes—UP planning 3rd track which complicates future trail segment connections	No
Alton Bike Trail							
Old Highway 40 Bike Path							

Trail Name	Who pays for trail insurance?	Has there been any trail user or train accidents on the corridor?	If there have been accidents, please briefly describe the occurrence(s).	Have any claims been filed against your agency or against the railroad?	Is your agency required to indemnify the railroad?	Please indicate how frequently trains run on the adjacent tracks.	What is the train speed?
Fillmore Railroad Trail	City of Ventura	No		No	Yes	Recreational train; 4 on weekends and 1 every 2 days weekdays	21 to 50 mph
San Clemente Pedestrian Beach Trail	City of San Clemente, self-insured	No	No accidents since trail, but incidents with train prior to trail.	Yes, regarding train horns at new rail crossings	Yes	50/day—this is a 7 by 24 hr freight and passenger rail	up to 40 mph
Hoover Bike Path	The bike path is for public use	Unknown		Unknown	Unknown	1/day	25 mph
Atchison, Topeka and Santa Fe Trail (aka Walnut Trail)	City of Irvine	Unknown		Unknown	Unknown	8–9/day	90 mph
Manteca Tidewater Bikeway	City of Manteca	Unknown		Unknown	Unknown	10-15/day	21 to 50 mph
Metro Orange Line Bikeway		No	There have been bus accidents with cars, especially at inception of route—community not used to buses and dealing with crossings close to intersections.	No	Yes	6/hour	Unknown
Martin Luther King Promenade		No		No	Unknown	30/day of different types	21 to 50 mph
Rose Creek to Mission Bay Bike path		Unknown		Unknown	Unknown	25–30/day	51 to 75 mph
Watts Towers Crescent Greenway						6/hour	50 mph
Escondido Segment Inland Bike Trail	City	No	No trail accidents but there have been many trespassing accidents on the rail line and this is one of the main reasons for the trail	No	Unknown	70/day	60 mph
Santa Clara River Trail	City is self-insured						
Folsom Parkway	City of Folsom	No		No	No	25/day	50 mph

Trail Name	Who pays for trail insurance?	Has there been any trail user or train accidents on the corridor?	If there have been accidents, please briefly describe the occurrence(s).	Have any claims been filed against your agency or against the railroad?	Is your agency required to indemnify the railroad?	Please indicate how frequently trains run on the adjacent tracks.	What is the train speed?
San Luis Obispo Railroad Safety Trail	City of San Luis Obispo	No		No	Yes	8 –10/day	Unknown
Santa Maria Valley Railroad Trail	City of Santa Maria	No		No	Yes	2/day	20 mph
Sacramento River Parkway Trail	City of Sacramento	No		No	No	4/day	20 mph
Coastal Rail Trail-Solana Beach	City of Solana Beach	No		No	Yes	approximately 25/day	50?
Coastal Rail Trail-Oceanside	City of Oceanside	No		No	N/A	approximately 25/day	60 mph
Coastal Rail Trail-Carlsbad	City of Carlsbad	No		No	Yes	approximately 25/day	60 mph
San Francisco Bay Trail, Pinole Shores/Hercules Area	East Bay Regional Parks	No		No	N/A	40/day	35mph
Alton Bike Trail							
Old Highway 40 Bike Path							

Trail Name	If the rail is used by various trains that operate at different speeds, please describe the different trains and provide the frequency and speed of each.	What is the annual number of users of the trail?	If there is another person or organization associated with the trail who may be able to provide greater detail in this survey, please provide their contact information here.	Contact Person
Fillmore Railroad Trail		Not known; evening crowded with walkers especially in summer; Brochure says 78,000		Bert Rapp City Engineer 805.524.3701 brapp@ci.fillmore.ca.us
San Clemente Pedestrian Beach Trail	Specific speeds not known but moderate to slow	Not known		Tom Bonigut 949.361.6187 BonigutT@san-clemente.org
Hoover Bike Path	Freight	Unknown		Marwan Youssef City Engineer 714.898.3311x219
Atchison, Topeka and Santa Fe Trail (aka Walnut Trail)				Darrell Cheam Public Works 949.724.7292 Dcheam@ci.irvine.ca.us
Manteca Tidewater Bikeway		100,000 +	We've had a lot of retirements in the past year. The people that were mostly involved in the construction of the trail in 1997 are now gone.	Mark Hall Deputy Director of Parks 209.456.8613 mhall@ci.manteca.ca.us
Metro Orange Line Bikeway		Heavily used	Carlos Rodriquez carlos.rodriquez@lacity.org	Michael Uyeno michael.uyeno@lacity.org
Martin Luther King Promenade	Trolley runs 20 per day SP Coaster 10 per day (passenger) SP Freight 6 per day (freight)			Rick Thompson Open Space Trails Manager 619.533.6756 rthompson@sandiego.gov
Rose Creek to Mission Bay Bike path		110,000		Rick Thompson Open Space Trails Manager 619.533.6756 rthompson@sandiego.gov
Watts Towers Crescent Greenway				213.977.1600x1960
Escondido Segment Inland Bike Trail	Commuter rail—Sprinter BNSF Freight trains run 1-2 per week at night			Jay Paul City Planner 760.839.4671x4537 jpaul@ci.escondido.ca.us
Santa Clara River Trail		33,000		Tom Reilly 661.255.4394
Folsom Parkway		70,000		Jim Konokpa 916.351.3516 jkonopka@folsom.ca.us

Trail Name	If the rail is used by various trains that operate at different speeds, please describe the different trains and provide the frequency and speed of each.	What is the annual number of users of the trail?	If there is another person or organization associated with the trail who may be able to provide greater detail in this survey, please provide their contact information here.	Contact Person
San Luis Obispo Railroad Safety Trail	2 Amtrak per day and 6 to 8 are UP freight (anticipate more freight when economy improves)	Unknown as yet but anticipate heavy use since the grade is only 2%		Peggy Mandeville 805.781.7590 pmandeville@slocity.org
Santa Maria Valley Railroad Trail	Freight	7500		David Beas City Engineer 805.925.0951x225 dbeas@ci.santa-maria.ca.us
Sacramento River Parkway Trail				Ed Cox Alternate Modes Coordinator 916.808.8434 ecox@cityofsacramento.org
Coastal Rail Trail	Coaster—every 1/2 hour during day, 60 mph. Amtrak 6 a day, 60 mph. Freight 1-2 a day, 40 mph			Dan Goldberg City Engineer 858.720.2474 dgoldberg@cosb.org
Coastal Rail Trail	Coaster—every 1/2 hour during day, 60 mph. Amtrak 6 a day, 60 mph. Freight 1-2 a day, 40 mph	5200		Steve Tisdale Bike/Ped Coordinator 760.435.5088 STisdale@ci.oceanside.ca.us
Coastal Rail Trail	Coaster—every 1/2 hour during day, 60 mph. Amtrak 6 a day, 60 mph. Freight 1-2 a day, 40 mph	2400	Sherri Howard Associate Engineer 760.602.2756	Kyle Lancaster Parks Superintendent 760.434.2941 Kyle.Lancaster@carlsbadca.gov
San Francisco Bay Trail Pinole Shores/Hercules Area	Capitol Corridor passenger, UP Freight			Jim Townsend Trails Development Program Manager East Bay Regional Parks JTownsend@ebparks.org
Alton Bike Trail				Ron Ono 714.571.4220
Old Highway 40 Bike Path				