

Freeway Congestion

Could a railroad hold the key to reducing traffic?

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Just west of Fairfield, California, next to old Cordelia, there is a junction of two Interstate Highways, a State Highway, three on/off ramps and a truck weighting station, all within a one-mile stretch. At times, the freeways at this point in Solano County look more like parking lots. One of the highways affected by this is the east-west route to all of the San Francisco Bay seaports, Interstate 80, which serves the commercial needs of Solano County and the entire western United States.

This interchange has proven vital to Solano County, as it serves as a major commuter route to jobs in the San Francisco Bay area and Sacramento. It's also a major truck route linking the Port of Oakland to the rest of the western United States. The regional tourist traffic, combined with the growing local traffic, has resulted in bottlenecks that will only get worse as the population increases and the economy expands. The Interstate 80, 680 and State Highway 12 interchange has experienced an increase of 25,000 daily trips since 1995, to more than 190,000 per day. Current state and federal funding limitations indicate that this interchange may not be improved for 20 to 30 years.



There are two major problems that the County faces with the various proposals that have been submitted to improve the traffic situation. First, outside traffic and environmental consultants have already told the County that, even if current projects are approved, the rate of traffic growth will only be slowed, not diminished. Secondly, lying to the east and south of this traffic quagmire is the Suisun Marsh, and any expansion into either the Marsh or the historical town site of Old Cordelia to widen or improve the existing highway interchange would meet with considerable opposition.

The Marsh – Home to Many

The Suisun Marsh is located in southern Solano County, California, approximately 35 to 40 miles northeast of San Francisco. It is bordered on the east by the Sacramento-San Joaquin Delta formed by the confluence on the Sacramento and San Joaquin rivers, on the south by Suisun Bay, on the west by Interstate Highway 680, Cordelia Village and the old town Cordelia, and on the north by Interstate Highway 80, California State Highway 12 and the cities of Suisun and Fairfield.

The Suisun Marsh is the largest contiguous brackish water marsh remaining on the west coast of North America. It is a critical part of the San Francisco Bay-Delta estuary ecosystem. Encompassing 116,000 acres, it includes 52,000 acres of managed wetlands, 27,700 acres of upland grasses, 6,300 acres of tidal wetlands and 30,000 acres of bays and sloughs. Representing more than 10% of California's remaining natural wetlands, the marsh is home to public fishing and waterfowl hunting areas, 158 private duck clubs and serves as the resting and feeding ground for thousands of waterfowl migrating on the Pacific Flyway. It provides an essential habitat for more than 221 bird species, 45 animal species, 16 different reptilian and amphibian species, and more than 40 fish species. The marsh also supports 80% of the state's commercial salmon fishery by providing important tidal rearing areas for juvenile fish allowing them to grow twice as fast as those reared in the upper watershed, thus, greatly enhancing their survival.

Two hundred and thirty miles of levees within the Marsh provide critical protection of the drinking water for 22 million people by preventing salt water intrusion into the Delta. The Marsh's large open space and proximity to vast urban areas make it ideally suited for wildlife viewing, hiking, canoeing, and other recreation opportunities.

Opposing Needs

So herein lies the conflict - on the one hand there are commercial and economic interests who want to supply goods and services to various destinations, and those who simply need to commute to their jobs in a reasonable time so they can continue to enjoy their lifestyle in the Bay area. These groups contribute heavily to California's financial stability through the taxes they pay and the purchases they make.

On the other hand, there is a group of concerned citizens who regard the Suisun Marsh as a pristine wilderness which must be saved at all costs, although a brief review of Solano County history will show that there have already been industrial intrusions into the marsh. This second group is much smaller than the first but they are much more vocal and exert much more influence on public policy than their numbers warrant.



How can a solution be found that will meet the needs of two groups that are so diametrically opposed? Is it possible to satisfy the concerns of those who want to preserve the environment of the Suisun Marsh, while at the same time meet the needs of commuters and commercial interests? Is it possible that a railroad, regarded in some quarters as the environment's worst enemy, holds the key to greatly reducing the traffic snarl at the interchange while preserving the ecological sanctity of the marsh?

The Railroad Corridor

Stretching from Benicia in southwest Solano County to the city of Davis in the northeast corner of the county, a distance of approximately 40 miles, there is a 100-foot wide railroad corridor currently owned by the Union Pacific Railroad. This corridor parallels Interstate 680 from the Benicia Bridge to the east side of Benicia Industrial Park, a distance of four miles, where the two separate. Interstate 680 then turns northward toward Cordelia where it joins Interstate 80, while the railroad continues its northeasterly route crossing about 10 miles of the Suisun Marsh.

This corridor, which is double-tracked and carries between 80 and 90 trains per day, functions as the main rail connection from the San Francisco/Oakland area to Sacramento. Many of these trains are part of the commuter rail system called the Capitol Corridor, which connects Sacramento to San Jose by way of Oakland and the East Bay. The majority of the traffic is comprised of double-stacked freight containers and automobile carriers coming from the ports of Oakland and Benicia.

This is a heavily used rail corridor and yet, with all the train traffic, only about 35 feet of the corridor's 100-foot width is actually used for railroad operations. The unused width of roughly 65 feet holds much promise for resolving some of the traffic and environmental problems occurring at the freeway junction previously mentioned.

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A Possible Solution

One proposal that has not yet been put forth by government agencies involves a freeway bypass using an elevated causeway across 10 miles of the Suisun Marsh, two lanes on either side of the present rail corridor and yet within the boundaries of the 100-foot corridor. Each traffic lane would be 12-feet wide with enough remaining space for a six-foot shoulder. Actually, the width could be increased by acquiring the air rights from adjacent properties. This would permit observation/vista points along the causeway. The marsh has a great variety of wildlife but at the present time, only a relatively few hunters and fishermen get to see it. The general public rarely, if ever, has the opportunity to see this great treasure of Northern California. The remaining distance of about 30 miles would be on non-environmentally sensitive land, using existing county roads in some places.

Are there problems with this proposal? Of course! Every proposal that has been put forth to solve the freeway congestion at Cordelia has problems. Some require the destruction and relocation of existing businesses, others require an intrusion into the historical section of old Cordelia, still others would require that additional lands be purchased from the Suisun Marsh, a move which would be hotly contested. Even if one of these proposals is accepted, then the enormous problem of how to finance the proposal raises its head.

Over the past several years, county officials have been seeking new sources of funding, including a ½-cent sales tax increase, submitted to voters in November 2004. While that tax increase would have begun to fund highway improvements, such as upgrading and widening local interchanges and mainline facilities on all three Interstate Highways in Solano County, it would not have provided sufficient funds to complete all the necessary tasks, which left the question of how the remainder would be financed. Needless to say, the voters were not willing to buy such an open-ended scheme.

In two subsequent elections, similar proposals were placed on the ballot and both were defeated. Thus, the County and City governments found themselves in the untenable position of getting complaints from their constituents about the traffic problems, and yet were told by the same voters that they didn't want to pay for the needed improvements.

Pros and Cons

So, what are the advantages of this proposal? To start with, the existing corridor is private property and already dedicated to heavy industrial use. No new marsh land would have to be acquired, although some air rights may have to be purchased. There would be no impact on the small town atmosphere that exists in Old Cordelia. There would be no need to acquire properties as outlined in the current proposals. There would be no need to demolish existing structures or pay relocation expenses. There would be savings in time and money, as there would be negotiations with only one landowner and one set of attorneys, as well



as only one escrow to be performed. And last but not least, the costs of acquisition and construction could be recaptured by charging a modest toll to use the bypass. What reasonable driver would not rather pay a few dollars to avoid the annoying headaches and delays caused by continuous traffic jams at Cordelia and Fairfield? It is estimated that this proposal would reduce the traffic count at Cordelia by 30%.

What about the possible drawbacks? First, there would be a legitimate concern about the environmental impact on the marsh and the associated wildlife. There would probably be some disruption during construction, but it would most likely be of short duration. About 45 miles to the northeast of this badly congested intersection, near the physical end of this proposed bypass, is the Yolo Bypass, a flood diversion basin. It is crossed by two elevated causeways with eight lanes of very heavy traffic. Just north of the highway causeways is one

for the same railroad we have been considering as it approaches Sacramento with its 80-90 trains a day. Yet, what do we find under these causeways? The Vic Fazio wildlife area! It started as a 3,700 acre wetland restoration project constructed by the U.S. Army Corps of Engineers and Ducks Unlimited, located within the Yolo Bypass between the cities of Davis and Sacramento. The Yolo Causeway, part of Interstate 80, and the Union Pacific Railroad trestle run through the wildlife area. In 2001, the area was expanded to 16,000 acres. The restoration was named for Congressman Vic Fazio, who lobbied for the project and was instrumental in appropriating funds for the initial construction. The flood plain that makes up the Yolo Bypass receives water from the Sacramento River and provides an Important Bird Area (an Audubon Society designation) of the Pacific Flyway for an impressive variety of waterfowl.

About 45 miles southwest of the intersection is the Dunbarton Bridge connecting Palo Alto with the cities of Fremont and Union City on the east shore of the San Francisco Bay. The east end bridge approaches are elevated causeways with very heavy traffic. But what exists under the causeways? The Don Edwards San Francisco Bay National Wildlife Refuge, which spans 30,000 acres of open bay, salt pond, salt marsh, mud flats, upland and vernal pool habitats located throughout South San Francisco Bay. Located along the Pacific Flyway, the refuge hosts more than 280 species of birds each year. Millions of shorebirds and waterfowl stop to refuel at the refuge during the spring and fall migration. In addition to its seasonal visitors, the refuge provides a critical habitat to resident species like the endangered California clapper rail and salt marsh harvest mouse. Today, hundreds of thousands of people visit the refuge each year to enjoy its diverse wildlife and habitats.



Based on this physical evidence, it appears that wildlife, heavy vehicle traffic and active railroads can coexist successfully without any noticeable detriment to the natural ecosystem.

The only other major negative aspect of this railroad proposal is that the corridor runs through Suisun, Elmira and Dixon and could cause a heavy impact on traffic and access to shopping. This problem could be easily solved by leaving the corridor a short distance from the town, making a bypass around the town and then returning to the railroad corridor.

Solano County, working in conjunction with the California Department of Transportation, has been trying to solve this problem for several years. However, it's important to note that it's not simply a local problem. It affects the entire North Bay area. Since it is the only route to Sacramento and beyond, the problem therefore affects local residents who commute and commercial trucks transiting the area. The problem is worth the time and effort it will take to solve it.

Conclusion

There must be many other locations around the U.S. where this same problem of steadily increasing traffic congestion exists. It seems that the Bay area problem could be easily solved by using an underutilized portion of an existing transportation corridor. This may not be the answer in all cases but, considering the potential savings of time and money that could be generated, it would be in our best interest to take a second look at some of our most neglected and yet most valuable real estate assets - our network of transportation corridors.