

Decision No. 77342

ORIGINAL

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Petition of SOUTHERN PACIFIC  
TRANSPORTATION COMPANY for issuance  
of order instituting investigation  
to determine the necessity, if any,  
for establishment of train speed  
limitations in the City of Belmont,  
California, to determine the neces-  
sity, if any, for modification of  
the controls of automatic grade  
crossing protection in the City of  
Belmont, California, and to apportion  
the costs of installation and main-  
tenance of any modifications of  
automatic grade crossing protection  
that may be required in the City of  
Belmont, California

and

Application for a temporary  
restraining order restraining and  
prohibiting the imposition or  
enforcement of Ordinance No. 445 of  
the City of Belmont, California,  
pending completion of investigation  
by the Commission.

Application No. 51879  
(Filed May 1, 1970)

Investigation into train speeds for  
the SOUTHERN PACIFIC TRANSPORTATION  
COMPANY within the CITY OF BELMONT,  
CALIFORNIA.

Case No. 9061  
(Filed May 12, 1970)

Harold S. Lentz and Joseph L. Lemon,  
for Southern Pacific Transportation  
Company, applicant in Application  
No. 51879 and respondent in Case  
No. 9061;

Kenneth M. Dickerson, for the City of  
Belmont, respondent in Case No. 9061.

Timothy E. Treacy, Counsel, for the  
Commission staff.

O P I N I O N

On May 1, 1970 the Southern Pacific Transportation Company (SP) petitioned the Commission to issue an Order Instituting Investigation to determine the necessity, if any, for establishing train speed limitations in the City of Belmont, and to issue a temporary restraining order restraining and prohibiting the imposition or enforcement of Ordinance No. 445 of the City of Belmont<sup>1/</sup> pending completion of investigation by the Commission. On May 5, 1970 the Commission issued its Order to Show Cause ordering Belmont to appear and show cause, if any it has, why said restraining order should not issue as prayed. The Order to Show Cause was set for hearing in San Francisco on May 8, 1970 and was continued for hearing until May 15, 1970. On May 12, 1970 the Commission issued its Order Instituting Investigation to determine the necessity, if any, for the establishment of train speeds within Belmont and to enter any order or orders that may be appropriate in the lawful exercise of

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<sup>1/</sup> Ordinance No. 445 limits railroad train speeds within the city limits of Belmont to 35 mph. It was adopted April 13, 1970, effective May 13, 1970. It was in effect as of the first day of hearing in this case, May 15, 1970, and was considered. On May 25, 1970 Belmont repealed Ordinance No. 445 and adopted Ordinance No. 446 which limits railroad train speeds to 35 mph only within a small portion of the City of Belmont. Ordinance No. 446 was introduced in evidence at the May 28, 1970 hearing, and was considered. Section 1 of Ordinance No. 446 states:

"It shall be unlawful for any engineer, fireman, brakeman, conductor or other person having any train or railroad cars or any part or section of any such train or any railroad locomotive or any engine under his charge, control or direction, in whole or in part, to run such train, section of train, locomotive or engine, or cause the same to be run on any railroads within the City at a speed exceeding thirty-five miles per hour, between a point 100 yards North of the center of Ralston Avenue at its intersection with the railroad tracks and a point 100 yards South of the center of Harbor Boulevard at its intersection with the railroad tracks."

the Commission's jurisdiction. The Order Instituting Investigation was set for hearing in San Francisco on May 15, 1970, and on that date was consolidated for hearing with SP's application. The consolidated hearing was held on May 15 and 22, 1970 before Commissioner J. P. Vukasin, Jr. and Examiner Robert Barnett.

As the Commission did issue an Order Instituting Investigation to determine train speeds in Belmont and did not issue a temporary restraining order restraining and prohibiting the imposition and enforcement of Ordinance No. 445 pending completion of investigation by the Commission, Application No. 51879 will be dismissed as moot. The balance of this opinion will deal with the issues raised by the Order Instituting Investigation.

The chief of police of Belmont testified that he conducted a survey to determine the number of train-automobile accidents and train-pedestrian accidents between 1965 and 1970 in the cities of Brisbane, South San Francisco, San Bruno, Millbrae, Burlingame, San Mateo, San Carlos, Belmont, Redwood City, Menlo Park, and Atherton. The results of this survey showed that during the period surveyed there were 47 train-auto accidents and 6 train-pedestrian accidents. He testified that radar was used to determine the speed of trains passing through Belmont on May 6, 7, and 8, 1970; trains were clocked at speeds as high as 76 mph. He testified that the highest number of accidents in any city covered by his survey was 22 in Redwood City; the only city among those surveyed that has a municipal ordinance governing train speeds. The speed limit in Redwood City is 45 mph. No accidents were reported in Belmont.

An engineer for the SP testified that there are only two grade crossings in Belmont, both protected by flashing lights and automatic gates. Pursuant to Commission General Order No. 75-B the gates are set to operate between 20 and 30 seconds in advance of the fastest train. Because gate circuitry has not been reset in the short time since the effective date of Ordinance No. 445, this advance time has increased to 60 seconds for westward trains. To comply with Ordinance No. 445 and General Order No. 75-B, the SP will have to modify the circuitry that operates the gates. One form of modification, the installation of predictors, would cost approximately \$20,000; however, there are other methods less costly. In the witness's opinion, the reduction of train speed at Belmont from 79 to 35 mph will have no material effect on safety because accidents occurring while trains are traveling at 35 mph are about as severe as accidents occurring at 79 mph.

The general manager of SP's Passenger and Government Traffic Branch testified that the SP operates 22 trains in each direction Monday through Friday between San Francisco and San Jose serving 21 stops along the route and carrying approximately 11,500 passengers daily in each direction. Of these 22 trains, six do not stop in Belmont. In addition, the Coast Daylight train operates once a day in each direction and does not stop at Belmont. Each weekday approximately 5,600 eastbound passengers and 4,700 westbound passengers travel on trains that do not stop at Belmont. The nonstop trains traveled at approximately 70 mph through Belmont prior to the effective date of Ordinance No. 445. When speed was reduced from 70 to 35 mph over two minutes was added to the travel time of passengers. Because at evening peak hours the SP runs its

commute trains on a three-minute headway there is not enough leeway in the schedule to make up for the Belmont slowdown and, therefore, the whole San Francisco-San Jose schedule will have to be increased by three minutes.

The general superintendent of transportation for the SP testified that on the line in question the maximum speed is 79 mph but that particular locomotives can operate no faster than 70 mph. Effective 12:01 a.m. Wednesday, May 13, 1970 the SP instituted a 35 mph speed limit through Belmont. The track of the SP is within the city limits of Belmont for a distance of one and one-half miles minus 2/100. In order to achieve a 35 mph speed through Belmont a train must begin slowing down at least a quarter of a mile before entering the city limits; to regain speed to 70 mph requires approximately one-half mile beyond city limits. These distances vary depending on the size of the train.<sup>2/</sup> The maximum effect of the reduction in speed from 70 to 35 mph is felt at stations beyond Belmont. In the witness's opinion there should be no speed restrictions within Belmont.

A senior transportation engineer for the staff introduced statistics concerning railroad operations within the Belmont city limits. He had no recommendation regarding speed limits in Belmont.

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<sup>2/</sup> This testimony was based on Ordinance No. 445. Under Ordinance No. 446 much of the slowing down and speeding up will take place within the city limits of Belmont. However, the effect of the slowdown is felt at all stops.

In addition to the testimony of its chief of police, Belmont introduced the testimony of seven public witnesses and its planning consultant. The seven public witnesses testified about their experiences at grade crossings involving near misses between automobiles in which they either were driving or were passengers, and trains. Most of these instances were within the past year and occurred in the cities of San Carlos, San Mateo, Redwood City, and Belmont.

The planning consultant testified that the average daily traffic counts at the two grade crossings in Belmont were Ralston Avenue, 20,400 cars, Harbor Boulevard, 6,500 cars. He testified that Ordinance No. 446 applied to only 2,300 feet of railroad track within the city limits of Belmont. The ordinance is effective between a point 4,300 feet south of the San Mateo/Belmont city limits and a point 1,400 feet north of the San Carlos/Belmont city limits.

An SP engineer testified that compliance with Ordinance No. 446 will slow SP trains approximately two minutes, rather than the three minutes caused by Ordinance No. 445.

#### Discussion

The sole issue in this case is to fix a speed limit through Belmont. Belmont asserts the limit should be 35 mph; the SP asserts that the limit should be fixed by timetable and special instructions; and the Commission staff takes no position. Considering the evidence with that issue in mind, we can give little weight to the testimony of the public witnesses who had near misses with SP's trains. In none of the incidents was there any reliable evidence as to the speed of the trains involved; nor was there any evidence that less hazard would have been created had the trains been traveling at a slower speed. And, as the incidents were described, we are

reasonably certain that some of the trains involved were traveling at less than 35 mph. This near-miss evidence, to the extent it is pertinent, would be applicable to any crossing in any city on the entire San Francisco Peninsula.

The Commission's long experience in the field of railroad safety teaches us that train-automobile accidents can occur at any speed and that reducing train speeds does not necessarily reduce accidents. In the City of Brentwood case, (1949) 49 CPUC 47, the SP sought authorization to operate its trains through Brentwood within the maximum speed limits as prescribed in the SP's official timetable, notwithstanding the fact that Brentwood had adopted an ordinance limiting the speed of all train movements within the city to 25 mph. In authorizing the SP to continue to operate its trains within Brentwood at official timetable speeds the Commission stated: "It is the opinion of the Commission that the hazard of accidents occurring at grade crossings cannot be substantially reduced except by providing adequate crossing protection, and that ordinarily the reduction of train speeds will not in itself eliminate or materially reduce such hazards. This fact is illustrated by the record of accidents at the two grade crossings here involved, for it reveals the occurrence of accidents when trains are operated at unusually low speeds and even while standing. ... The record made in the instant proceeding relating only to the question of reasonable train speeds does not indicate that speeds through Brentwood in excess of twenty-five miles per hour, as prohibited by Ordinance No. 31, bear a direct relationship to existing crossing hazards."

The evidence in the case at bar bears out the experience of the Commission in the Brentwood case. Belmont introduced a survey covering train-automobile accidents and train-pedestrian accidents between 1965 and 1970 in various cities on the Peninsula. The results of this survey show that during the period surveyed there were 47 train-auto accidents and 6 train-pedestrian accidents. Of these 53 accidents 22 occurred in Redwood City, the only city among those surveyed that has a municipal ordinance covering train speeds. The speed limit in Redwood City is 45 mph. In all other cities trains operated to the maximum speeds allowed by SP timetables, up to 79 mph. We conclude from these statistics that the speed of trains is not a significant factor on the safety of gate-protected crossings. In fact, Commission records consistently show that the incidence of train-automobile accidents is directly related to the adequacy of grade crossing protection and not to the speed of the train.

There are cogent arguments which persuade us to fix the speed limit through Belmont at such speeds as the SP may prescribe in its official timetable and special instructions. The Belmont speed limit extends travel time between San Francisco and San Jose approximately two minutes, and causes actual train delays in some cases of over five minutes. The San Francisco to San Jose commute run covers 46.9 miles. Including San Francisco and San Jose the SP trains stop at 16 cities. In the Belmont area one city blends into another; there are no open spaces. If Belmont sets a speed limit at variance with other speed limits there is no reason why other towns cannot do the same, depending upon the facts that persuade local city councils. The confusion that this would cause, and has caused in the aftermath of the Belmont ordinance, should not



be imposed upon the traveling public or the railroad. In order to cope with changing speed limits the SP would have to publish revised timetables after each change by each city, and tens of thousands of passengers would have to adjust their lives accordingly. When there is no compelling reason for varying speed limits the Commission has a duty to see that such results do not occur.

All petitions and motions not heretofore ruled on are denied.

Findings of Fact

1. There are two grade crossings in Belmont, both protected by flashing lights and automatic gates. Prior to the effective dates of the Belmont ordinances the gates were set to operate between 20 and 30 seconds in advance of the fastest train which traveled in accordance with the SP's timetable at speeds up to 79 mph. Because of the ordinances this advance time has increased, thereby causing motorists delay at the crossings.

2. The SP operates 22 trains in each direction Monday through Friday between San Francisco and San Jose serving 21 stops along the route and carrying approximately 11,500 passengers daily in each direction. Of these 22 trains, six do not stop at Belmont. In addition, the Coast Daylight train operates once a day in each direction and does not stop at Belmont. Each weekday approximately 5,600 eastbound passengers and 4,700 westbound passengers travel on trains that do not stop at Belmont. The nonstop trains traveled at approximately 70 mph through Belmont prior to the effective date of Ordinance No. 445. When speed was reduced from 70 to 35 mph about two minutes was added to the travel time of passengers. Because at evening peak hours the SP runs its commute trains on a 3-minute headway there is not enough leeway in the schedule to make up for the Belmont slowdown and, therefore, the whole San Francisco-San Jose schedule will have to be increased by two minutes.

3. The maximum effect of a reduction in speed from 70 to 35 mph is felt at stations beyond Belmont, with some trains now operating as much as five minutes behind schedule.

4. The speed of a train has little bearing on traffic safety at gate-protected grade crossings. The incidence of train-automobile accidents is primarily related to the adequacy of grade crossing protection.

5. The public needs and requires a high speed transportation system. Restricting railroad speed through Belmont does not materially improve safety but does hinder the development of a high speed transportation system.

6. Grade crossing safety devices and block signals have been improved to such an extent that trains may travel in safety through Belmont at speeds up to those prescribed in the SP's timetable and special instructions.

The Commission concludes that the railroad speed limit through Belmont should be as set forth in the following order.

O R D E R

IT IS ORDERED that:

1. The railroad speed limit through the City of Belmont shall be that prescribed in the Southern Pacific Transportation Company's timetable and special instructions.

A. 51879, C. 9061 ds

2. Application No. 51879 is dismissed.

The effective date of this order shall be the date  
hereof.

Dated at San Francisco, California, this  
9th day of JUNE, 1970.

William J. Lyons Jr.  
President

August

William J. Lyons Jr.

Thomas L. Sturgeon

Vernon L. Sturgeon  
Commissioners