



# High-Speed Rail and Equine Issues

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This paper summarizes the results of a review of existing scholarly and professional literature regarding the possible impacts of the creation of high-speed rail (HSR) routes on surrounding equine populations and equestrian recreation. Additionally, the study includes maps that help illustrate the distribution of equines and equine facilities in the Palmdale-Burbank area.

## Study Methods

Primarily a “desktop” study, this project is based upon review of existing research and other systematically recorded information concerning interaction between equine populations and HSR systems, with a focus on horses. An extensive search of various electronic bibliographic databases was conducted to identify relevant research. In addition to academic sources, the authors also sought other sources of systematic research, such as government reports, to help identify the current state-of-the-art knowledge in this specific subject area. Since no original research was conducted, the project does not support specific recommendations.

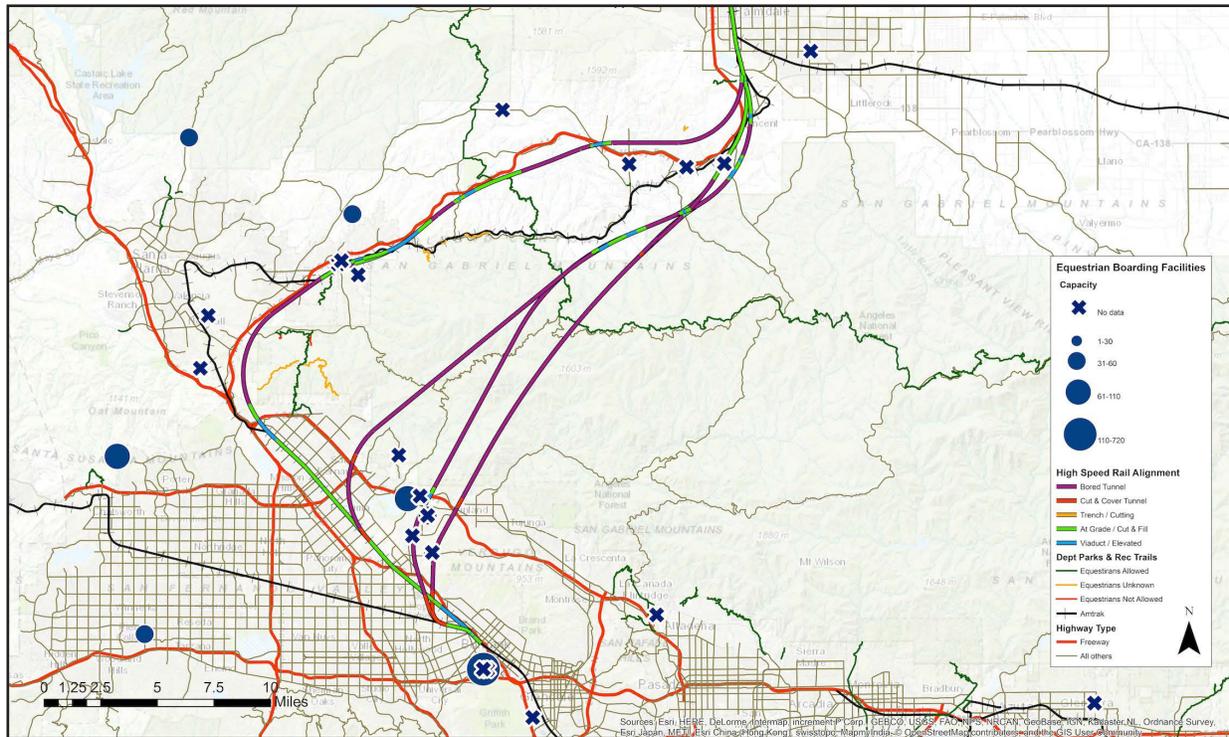
## Findings

The primary finding from the study is that very little research has been conducted concerning the possible impact of HSR systems on equines and equine facilities and recreation, suggesting that very few (if any) examples of such conflict exist. The existing related research has tended to focus on the effects of jet aircraft on wildlife, rather than on high-speed trains and livestock. The following general findings were supported by existing research:

- Existing HSR lines operate below noise levels that would directly harm horses, and damage to horses has not been documented.
- Loud noises may have the potential to startle horses, which could have various detrimental effects on the well-being of horses and their riders. However, estimates of the amount of noise that might serve to startle horses are rough, and virtually no systematic research has been conducted to establish such criteria.
- The very few studies that seem the most relevant – i.e., those that explicitly seek to address the link between noise and a response from equines – uniformly conclude that horses tend to “habituate” to regularly repeated noises. However, this response pattern appears not to have been subject to systemic testing with respect to the noise produced by high-speed trains.
- Perhaps most definitively, in commenting on a HSR proposal in the UK, the International League for the Protection of Horses has stated that “horses usually became habituated to repeated noise including that from passing trains, although it is acknowledged that there may be a short period of adjustment.”

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- Maps created for this project suggest that equines and rail facilities commonly coexist through California and the US. In the Palmdale-Burbank area, HSR routes currently under consideration by the CSHRA pass near several existing equine facilities and equestrian trails; however, existing rail service, roads, and highways also pass by these areas.



**Palmdale-Burbank High Speed Rail and Equestrians**

### About the Authors

Peter Haas is Director of Education and serves on the faculty of the Master of Science in Transportation Management program of the Mineta Transportation Institute at San Jose State University. Dr. Haas has authored numerous reports and other publications on transportation topics, including high-speed rail workforce development and station planning and transportation finance and tax initiatives. He also co-authored the text *Applied Policy Research: Concepts and Cases*. Allie Scrivener is a regional planner at the San Diego Association of Governments (SANDAG), where she provides construction compliance and permit coordination for projects within the Los Angeles - San Diego - San Luis Obispo corridor. She recently completed her Master of Science in Transportation Management at San Jose State University.

### To Learn More

For more details about the study, download the full report at [transweb.sjsu.edu/project/1427.html](https://transweb.sjsu.edu/project/1427.html)