

January 13, 2016

Mineta Transportation Institute College of Business 210 N. 4th Street, 4th Floor San Jose State University San Jose, California 95192-0219 Attn: Karen Philbrick, Ph.D., Executive Director

Re: Mineta Transportation Institute Involvement in California High Speed Rail Authority Studies (e.g. "Report WP 12-07: High Speed Rail and Equine Issues or the Equine Study")

Dear Ms. Philbrick,

This letter is submitted on behalf of and with the input and endorsement of the S.A.F.E. Coalition (*Save Angeles Forest for Everyone*), which consists of community leaders from throughout the northeast San Fernando Valley. Please share this letter with members of your board of directors.

The S.A.F.E. Coalition includes the communities of Shadow Hills, La Tuna Canyon, Sunland-Tujunga, Lake View Terrace, and Kagel Canyon, each of which borders the Angeles National Forest. We have united with communities such as San Fernando, Pacoima, Sylmar, and Santa Clarita to protect sensitive environmental areas and densely populated areas threatened by the high speed train project. Together, we represent hundreds of thousands of people impacted by the terrible East Corridor and SR14 routes proposed by the California High Speed Rail Authority (CHSRA) for its high speed train.

We have serious concerns regarding Mineta Transportation Institute's (MTI) appointment to conduct/author two studies related to proposed alignments along the Palmdale to Burbank high speed train project section. Per the reasons outlined in this letter, we call upon MTI to 1) withdraw immediately its present equine study; 2) issue a determination that CHSRA must commission actual field studies to be conducted by independent, third-party experts in order to determine the impacts of high speed trains on equines/equestrian communities; and 3) resign immediately from any further engagement in studies (e.g tunneling impact study) by the California High Speed Rail Authority. Further, this letter is to inform you that we have filed a complaint with the State Auditor, under the California Whistleblower

Protection Act, asking for their review of the implications of the California High Speed Rail Authority having engaged MTI in these studies.

In our opinion, the studies in which you are engaged are being represented falsely to our communities, elected officials and the press as independent, third-party or expert in nature. Though MTI may have many positive accomplishments, we believe MTI is simply the wrong entity to have been requested to do this work. MTI is not local or knowledgeable about the environment and character of our southern California communities and, in a gross abuse of trust with local leaders and stakeholders, was engaged by CHSRA without any awareness, collaboration or input from stakeholders and elected officials in our southern California region. In fact, on numerous public occasions over a 6-month period, CHSRA refused to divulge information about their progress on the studies or whose involvement they were seeking to conduct the studies.

As background for you, nearly a year ago, in early 2015, S.A.F.E. leaders proposed to both CHRSA management and to local elected officials the concept of CHSRA partnering with a team of independent, third-party agencies/entities to conduct a key set of upfront studies that would help to determine the feasibility of the high speed train alignments proposed through our region. Those proposed studies advocated by S.A.F.E. included: (1) a water study, to review water resources in the Angeles National Forest, the San Gabriel Mountains National Monument, the Big Tujunga Wash, Hansen Dam, and the San Fernando Road Corridor (including the San Fernando Reservoir, Pacoima Reservoir, and nearby spreading grounds), and to determine the impacts of the proposed routes on these water resources; (2) a seismology study, to review the numerous fault lines that comprise the fault system in our region, and to determine the feasibility/potential dangers of tunneling through these areas of known seismicity; and (3) a tunneling feasibility study, which would review the overall conditions in our region and determine the cost, impacts and feasibility of boring 20+ miles of tunnel and ancillary facilities (e.g. power plants, sub-stations, air vents, construction sites, etc.) under/through the San Gabriel Mountains and our communities, which was referred to in a recent L.A. Times article as "the most ambitious tunneling project in the nation's history."

Additionally, Assemblywoman Patty Lopez, who represents District 39 in the California State Assembly, requested a fourth upfront study: an equine study, which would evaluate the impacts of a high speed train system on horses and the equestrian communities which populate her district.

S.A.F.E. provided explicit recommendations to both CHSRA and local elected officials during several months of meetings and discussions in early 2015 about how the water, geology and tunneling studies should be organized and scoped. The purpose of the recommendations was to provide diverse, unbiased, expert opinion to the public, to elected officials, to government agencies and to CHSRA on the pressing issues of water, seismic, tunneling, and equine impacts. The studies were proposed in part to help everyone "know what they did

not know" about matters associated with what is to most a foreign experiment of high speed trains in densely populated and sensitive environmental areas. In reality, the studies were also proposed due to the poor performance by CHSRA statewide and in our region and the corresponding lack of trust we've witnessed between CHSRA and stakeholders.

After many discussions on the subject, the understanding between S.A.F.E. and our local elected officials (Supervisors Antonovich and Kuehl, and Councilman Fuentes), who requested such studies in a strong letter submitted to CHSRA on June 2, 2015, was that CHSRA would: (1) partner with a <u>team</u> of experts from federal, state, county, and city governments, and augment that group with expertise from environmental leaders/policy organizations with field expertise in the specific study area (e.g., the Sierra Club); (2) collaborate with these experts, as well as with elected officials and local community leaders, regarding the scope of work of the upfront environmental studies; and (3) hold regular meetings and solicit feedback from stakeholders on both proposed scopes of work and findings of the research. In fact, CHSRA's Chairman, Dan Richard, committed at their June 9, 2015 board meeting to providing regular updates about the studies on their website; that commitment was not honored.

What you may not be aware of is that S.A.F.E. made numerous public/verbal and written requests of CHSRA relative to the status of constituting the study team and the scopes of work over a 6 month period from June 2015 until December 2, 2015. Our requests for information were ignored and CHSRA provided no information until it disseminated a short email announcement on December 2, 2015. Given the lengthy and very public discussions about the need for these studies, surely you can appreciate our surprise on December 2nd when CHSRA announced that MTI had been selected as the <u>sole entity</u> to conduct both the tunneling study and the equine study. While we have no issue with MTI or its past work, we believe that MTI inadvertently became party to these two studies that are <u>not</u> the type of unbiased field studies envisioned and expected by S.A.F.E., our communities, and our elected officials.

In addition to the fact that MTI alone cannot perform the type of peer review/cooperative research that is demanded by these crucial studies, we believe that the integrity and usefulness of the studies are further compromised, biased and diminished due to what we believe to be a conflict of interest between MTI and CHSRA in this circumstance. In our opinion, for an agency such as CHSRA, which purports to be transparent in its operations, we find it unacceptable that the agency selected by CHSRA to conduct the independent, third-party expert studies coveted by our communities and elected officials possesses the following relationships to CHSRA and high speed train projects:

- 1. CHSRA CEO Jeff Morales sits on the MTI Board of Trustees;
- 2. An executive of HNTB, a prominent CHSRA contractor, sits on the MTI Board of Trustees;
- 3. MTI Board of Trustees Member and executive director emeritus, Ron Diridon Sr., is a former CHSRA board member and CHSRA chairman emeritus;

- 4. Along with CHSRA and Caltrans, MTI was a sponsor of U.S. High Speed Rail Association's high speed train conference held in downtown Los Angeles from December 9-11, 2015.
- 5. The primary funding sources for MTI are CalTrans and the U.S. Department of Transportation, each of which possesses a pro-rail bias.

In our opinion, the aforementioned associations and alliances demonstrate clearly that MTI is neither independent, nor a third-party. Further, we believe they demonstrate a clear, preexisting and underlying pro-rail bias that could encourage MTI, knowingly or unknowingly, to yield study results that favor CHSRA. We believe the selection of MTI to conduct the equine and tunneling studies represents exceedingly poor judgment by CHSRA, whose haste to complete the studies, given its well-known financial shortfalls and time constraints, led the agency to hand-pick industry contacts who would potentially produce biased reports, and who would also complete such reports in unrealistic timelines advantageous to CHSRA's political, financial and environmental interests.

Whether or not MTI or the authors of its studies were aware of the actual/perceived conflicts of interest prior to accepting the assignments is not our concern. Our concern is about the transparency and intent of CHSRA, the independence and quality of the work produced by MTI for CHSRA, the use by CHSRA of MTI's work to influence elected officials, the press and environmental agencies involved in the Federal/State prescribed environmental studies, and the effect of MTI's work on CHSRA's environmental studies, analyses and conclusions/recommendations.

Our concerns were realized last week, when we visited the MTI website and found that the "equine study" had been published. We still have no information or disclosures from CHSRA about the tunneling study. It's a fact that neither we, Assemblymember Lopez, who requested the study, the press, nor any other elected official was notified of the release of the equine study. This does not follow the form envisioned and expected by S.A.F.E. and our elected officials in proposing the upfront studies in the first place.

Furthermore, as S.A.F.E. possesses and has access to experts in the equestrian field, and having carefully reviewed MTI'S Equine Study, we challenge many of the assertions in the publication. In addition to our criticisms outlined below, we have referred the study to the L.A. Equine Advisory Committee and the Foothill Trails District Neighborhood Council's Equestrian Committee for their independent review.

 Authors' lack of experience/expertise in the subject area. The biographies of Peter Haas and Allie Scrivener evidence no biological, let alone veterinary, expertise -- or even any experience with equines or their behavior. The intention of the equine study was to convene a panel of experts in order to research the potential impacts of high speed trains on equines. We had recommended and had fully expected CHSRA to recommend or approach any of the following LOCAL EXPERTS as reputable and credible participants on this study:

- a. Cal State Polytechnic University, Pomona; Cal State Polytechnic University, San Luis Obispo; and/or the University of California, Davis, each of which boasts a substantial equine research department;
- b. The Back Country Horsemen of America, the U.S. Equestrian Federation, Equestrian Trails, Inc., and/or the City of L.A. Equine Advisory Committee; and
- c. Veterinarians from the Equine Medication Monitoring Program Advisory Committee.

Even if CHSRA did not specifically employ any of these entities to conduct the Equine Study, MTI could have solicited their participation and/or peer review of its study in order to validate its results. The fact that two authors with no equine experience whatsoever conducted a study without any participation or peer review by credible equine experts is an insult to our communities and a serious threat to a very important part of our economy, lifestyle and community character.

2. Desktop Study vs. Actual Field Research. In their executive summary, the authors explain the purpose of the Equine Study as being the "review of existing scholarly and professional literature regarding the possible impacts of the creation of a high speed rail route in California on surrounding equine populations and equestrian recreation." This statement alone indicates that MTI's assignment from CHSRA was off-strategy, as clearly the intention of the upfront studies was to have actual field research conducted on the topic – not simply to have someone type "Horses and High Speed Rail" into a random search engine and report back what turned up.

Furthermore, the authors state that, in their belief, "very little scholarly and professional research has been conducted" on the topic of horses and HSR, and from this they conclude that there exists a "concomitant lack of problems between HSR systems and equines." This is an erroneous statement and a ridiculous conclusion that obviously reflects MTI's pro-rail bias. The authors should have stated they were unable to document interactions involving high speed train systems and equestrians in this country. Common sense would dictate that the "paucity of published research", as noted by the authors, would lead them to conclude <u>that</u> actual field research should be done before reaching a conclusion on the subject matter.

3. <u>Habituation Response</u>. We take issue with the authors' biased conclusion that horses may habituate to the introduction of high speed trains to their environs, when the authors themselves acknowledge that "few existing studies have actually measured and scientifically verified the habituation process, and even fewer appeared to have focused on equines."

The concept of habituation applies with respect to the presence of ongoing, stable noise levels – for example, loud music, as the authors suggest, or steady traffic on a nearby freeway. The presence of a high speed train does not represent a steady,

stable, or ongoing noise level. It represents a sudden, shocking noise and electromagnetic levels, compounded by a sudden, large, kinetic physical presence, each of which would undoubtedly shock a prey animal such as a horse at each and every occurrence. As strangers to our region, the authors lack understanding of the way sound reverberates throughout the Forest or the Big Tujunga Flood Plain with its peaks, valleys, canyons, water resources, geologic formations, wind patterns and natural "amphitheaters." Again, this is a subject/test area in which actual field studies and participation by veterinarians is crucial to yielding useful and credible results.

Additionally, it is worth noting that the concept of habituation would require that equines be regularly and consistently exposed to high speed trains. However, in our particular region, we have not only horses who live here on a permanent basis, but also a significant number of "visitor equestrians" who come to our area specifically for equestrian shows, competitions, and other events. Many of these events regularly take place at the Hansen Dam Equestrian Center and neighboring stables and corrals, which are immediately adjacent to a proposed above-ground portion of high speed rail. Visiting horses and riders would have no previous exposure to high speed trains, and the sudden noise, vibration, and physical movement of the project's construction phase as well as ongoing train operations would put such horses and riders in danger.

Because the authors are not familiar with our area, they failed to take into account the fact that our region is an equestrian "tourist destination," and thus, that habituation is not practical or possible for many horses in our area.

- 4. <u>Hearing in Horses</u>. The authors' assertion on Page 10 that horses are "somewhat deaf compared to us (humans)" borders on ignorance, is untrue, and blatantly contradicts the prevailing, existing scientific research on the subject, which is unified in the conclusion that horses' hearing is much keener than humans, and better in many ways. The authors cite that equine hearing threshold is higher, and therefore conclude that horses have worse hearing. This is simply not the case. Humans have a limited hearing range of approximately 20 Hz to 20 kHz, while horses can hear low to very high frequency sound, in the range of 14 Hz to 25 kHz. The authors conclusion that horses are "deaf compared to us" intentionally and/or ignorantly minimizes the potential impact of high speed trains on equines and demonstrates the authors' underlying bias and pre-determined conclusions on this subject matter. It is this type of erroneous information that must be stricken from the record and not used by CHSRA in any way to curry favor or support with elected officials, environmental researchers, media, stakeholders and others.
- 5. <u>False/Insufficient Representation of Equine Presence in the Study Area.</u> While the S.A.F.E. has not conducted its own census of horses in our region, we can state with certainty that the horse population is severely underrepresented in MTI's Equine Study. We have brought the MTI study to the attention of the Los Angeles Equine

Advisory Committee, Equestrian Trails Inc. (ETI), the Equestrian Committee of the Foothill Trails District Neighborhood Council and numerous veterinary experts who will refute the study just as we have herein. Further, the entire concept of an "equestrian or country lifestyle, culture and community character" that ensues from more than a century of equine pursuits and evolution of the equine industry is overlooked by the authors.

First, it is worth noting the flawed methodology employed by the authors in determining the number/density of horses in our region. The authors conducted an internet search for equestrian boarding facilities in the region and attempted to contact some of these facilities in order to determine the total equine population. This methodology overlooks the fact that many properties in our region are zoned "K-overlay" (a local zoning designation requiring field study, not desktop study), which means that they are zoned to allow horses, though the property is residential, not a licensed boarding facility. The authors' flawed methodology accounts for the underreporting of thousands of horses in our region, many of whom reside on private ranches located in direct proximity to above-ground portions of the proposed high-speed rail alignments.

Second, the boarding facility survey conducted by the authors appears to be incomplete. Monte Verde Ranch, Courtship Ranch, and Middle Ranch – three of our area's most prominent, sizeable, historic, and respected boarding facilities – are notably absent from the map. Additionally, we contacted the owners of just two of the boarding facilities which are noted on the map with an X (indicating "No Data Available"), and both owners reported receiving no calls from MTI or anyone conducting an equine study.

Additionally, we have been in contact with residents of Acton who also feel that the equine population in their community has been underrepresented. One resident noted that the Equine Study "ignores 99% of the equestrian uses in Acton," and that if the authors had "bothered to actually visit the proposed routes, they might have seen this." We can only conclude that, due to MTI's underlying bias in favor of high speed rail, and the unrealistic time frames being advanced by CHSRA or imposed on MTI for its environmental studies overall, the authors lacked the time or the intent to make legitimate, good-faith attempts to accurately document the equine population in our region.

6. <u>Misleading Conclusions of the Rail/Equestrian Density Map</u>. The authors include the maps on Pages 27 and 29 "to provide a broad look at the current equestrian/rail co-existence." The conclusion that the authors want readers to reach is that equines happily co-exist with traditional train lines, and thus the addition of high speed trains to the existing equestrian communities will yield negligible cumulative impacts. This conclusion is fundamentally flawed, as the remainder of the authors' research examines the effect of trains on horses within a certain distance, typically 50 or 75

feet. The maps created cover an area over 800 miles in length, and it is impossible to evaluate on a micro level what percentage, if any, of the existing equine population exists within such proximity to existing rail lines. Moreover, the authors themselves acknowledge that the data "represent (equine) density only at the county level, which is necessarily imprecise." Therefore, the maps the authors created, which show horse populations sitting on top of existing train lines, is not only inaccurate, but also intentionally misleading by giving readers the impression that horses and rail peacefully coexist in close proximity, when the authors actually have no data to support that conclusion.

- 7. Lack of Study of Impacts of Vibrations. While the Equine Study touches on noise impacts, it fails to even mention, let alone study, the potential impacts of vibrations and sub-sonic noise that the high speed rail system will have on equines. Horses pick up low frequencies and vibrations through their hooves, and will sense the train more distinctly than humans. A field study, not a desk study, of the impact of vibrations is particularly crucial for both construction and operation phases, and all types of high speed train activity: bored tunnels, cut and cover tunnels, at-grade and elevated.
- 8. Lack of Study of Movement/Visual Motion. The Equine Study also fails to even mention, let alone study, the potential visual impacts that the high speed train system will have on equines. Along with noise and vibrations, the high speed train presents a large and fast moving physical threat which will undoubtedly have a negative impact on horses. The combination of noise, vibrations, and visual impact of the train creates a perfect storm of dangerous potential impacts on horses, which are animals that instinctually exhibit flight behavior. There is an excellent, expert video presentation on this topic on the S.A.F.E. website by Veterinarian/Dr. David Robertson that was viewed in person by several members of the CHSRA project management team last January 13, 2015. This video is presently viewable on our website (Part 1/Expert Testimony of the S.A.F.E./HSR Community Meeting see this link: https://www.dontrailroad.us/videos/).
- 9. Lack of Study of Acoustics. The Equine Study is deficient in that it fails to address the unique acoustics endemic to our area. Located in the Foothills of the San Gabriel Mountains, our region is comprised of peaks and valleys, as well as numerous canyons, water resources and wind patterns in which sound is amplified and modulated. In order to be considered credible, a study must take into account these unique acoustics which could amplify/magnify the sound of a high speed train and impact the volatility and unpredictability of the sound to high flight animals such as equines.

It must be taken into consideration that our equine population and their riders are very mobile within the Angeles National Forest and Big Tujunga Wash. They are not stationary within stables and corrals at all times. Hundreds, if not thousands of horses per day, may move along hundreds of different trails in different directions and at different times of the day.

Additionally, the authors note several sound level "facts" that warrant further discussion. In their Summary and Conclusions, the authors note that: "noise levels of 100 dBA SEL have the potential – at least in theory, as this is not documented – to harm horses…" but add that "existing HSR lines operate below that level." What "existing HSR lines" do is irrelevant in this case, as CHSRA purports that its high speed train system will operate at speeds in excess of 200 mph. There exists an abundance of data from studies on high speed train systems in Europe and Asia which indicate that a high speed train operating at 200+ mph generates noises levels exceeding 100 dBA. A recent study conducted in China concluded that high speed trains can generate in excess of 110 dBA.

Furthermore, the authors note that "the estimates for HSR trainsets are based on average or reference values, including a distance (from the train) of 50 feet." Again, this average distance fails to take into account canyon conditions, which could mean that horses that are within a significantly greater distance than 50 feet from the train may still be impacted due to the warping or magnification of sound in the canyon. A professional acoustic study is required in order to reasonably conclude the effect of such train systems on equines.

- 10. Lack of Study of the Construction Phase of High Speed Rail. While the Equine Study attempts to address the operational phase of high speed rail trains and their impact on horses, the Equine Study is deficient in that it fails to acknowledge, let alone address, the impact of the lengthy construction phase of the project on horses. By all accounts, the construction phase of the Palmdale to Burbank project segment will take 5 – 7 years (or more) to complete. Already, the equine population, as well as other users of Angeles National Forest, are facing helicopter and heavy truck movement of personnel and equipment by CHSRA during geotechnical testing being conducted in the Forest. With construction comes a completely different set of noises, as well as increased truck traffic along currently used equestrian routes, and a corollary increase in diesel emissions. The equine respiratory system is more sensitive to petroleum, diesel, and smoke, and thus the construction phase of highspeed rail has the potential to cause respiratory health issues in horses. A proper study by veterinarians is required to accurately predict the full scope of potential health impacts on equines resulting from the years of construction required to build any of the currently proposed alignments in the Palmdale to Burbank project section.
- 11. Lack of Study of the Economic Impact and the Corollary Impact on Community <u>Culture in the Area</u>. The Equine Study is deficient in that it fails to address the economic impacts of high speed trains on our equestrian communities. Equestrian activity in our area represents an economy of \$100+ million annually. Were a high speed train system to be constructed through our area, horse shows and events, trail

rides, fundraisers, equine training/rehabilitation for persons with disabilities, and training sessions would all likely be canceled. Many horse owners, for safety reasons, would have no choice but to move away from the region. This would impact local equine and subsidiary businesses. Our region is already experiencing, and would continue to see, a corollary depreciation in property values. Community events and our historic culture as the last remaining rural, equestrian community in Los Angeles would be lost forever.

In the Equine Study's abstract, the authors state that the "study will explore possible conflicts between HSR construction and operations in areas used for equestrian ranching, recreation, and related activities." The Equine Study fails to explore any conflicts other than noise, and in doing so, trivializes the full and far reaching effects that high speed trains would have not only on our economy, but more importantly, on our culture.

We conclude that MTI's Equine Study is vastly deficient in addressing its stated goal of exploring conflicts between HSR and equines/equestrian activities. In addition to the fact that, due to its ties to CHSRA and the high speed train industry, MTI was an inappropriate choice to conduct the Equine Study in the first place, we take exception to the non-transparent process employed by CHSRA to appoint MTI, the lack of commitment and follow through by CHSRA to constitute the studies collaboratively with stakeholders and elected officials, the flawed methodology employed by the authors, the flawed conclusions that necessarily followed, and to the many areas of interest which simply were ignored in the study.

We understand that MTI enjoys a solid reputation in some circles. We regret having to call MTI and its authors out on these matters. MTI has an opportunity to do the right thing for all involved and to cease involvement in these upfront studies immediately. Further, MTI must issue a determination that CHSRA commission actual field studies to be conducted by independent, third-party experts to determine the impacts of high speed trains on equines/equestrian communities.

Thank you for your thoughtful consideration of this matter. We will continue to work with our communities and elected officials to hold CHSRA accountable to protect our densely populated and sensitive environmental areas. Please do not hesitate to contact us with any questions or concerns you may have. Should you wish to contact us directly, please contact either Dave DePinto (818-352-7618) or Kelly Decker (818-761-7713) or Bill Eick (818-248-0050).

Sincerely, on behalf of the S.A.F.E. Coalition,

David J. DePinto, President, Shadow Hills Property Owners Assn. Kelly Decker, President, Kagel Canyon Civic Assn. Bill Eick, Land Use Chairman, Shadow Hills Property Owners Assn. Cindy Cleghorn, Member, Sunland-Tujunga Neighborhood Council Fritz Bronner, Lake View Terrace, Member, Foothill Trails District Neighborhood Council Gina Cruz, P.E., Lake View Terrace, S.A.F.E. Technical Committee

Peter Haas, Ph.D., Mineta Transportation Institute cc: Allie Scrivener, MSTM, Mineta Transportation Institute Governor Edmund G. Brown, Jr. Lt. Governor Gavin Newsom Attorney General Kamala Harris Congressman Adam Schiff **Congressman Tony Cardenas** Congresswoman Judy Chu Congressman Jeff Denham Senator Carol Liu Senator Bob Hertzberg Senator Bob Huff Assemblywoman Patty Lopez Assemblyman Scott Wilk Supervisor Mike Antonovich Supervisor Sheila Kuehl LA Mayor Eric Garcetti LA Councilmember Felipe Fuentes LA Councilmember Paul Krekorian LA Councilmember Mitch Englander LA Councilmember Nury Martinez Burbank Mayor Bob Frutos Burbank Councilmember Jess Talamantes Burbank Councilmember David Gordon Burbank Councilmember Emily Gabel-Luddy **Burbank Councilmember Will Rogers** Joseph Szabo, Federal Railroad Administration Chairman Elliott and Honorable Board Members, Surface Transportation Board Horace Greczmiel, Council on Environmental Quality