

UN-JUST COMPENSATION: HOW SEVERANCE DAMAGES AND INVERSE CONDEMNATION WILL AFFECT CALIFORNIA HIGH-SPEED RAIL TAKINGS

I. INTRODUCTION

California may soon face a showdown between the construction of modern day technology and the farms that have enriched the state for many years. The California High-Speed Rail system is quickly becoming a reality, with the first section of tracks, between Fresno and Bakersfield, scheduled to begin construction in 2012.¹ This section alone is slated to cost an estimated \$5.5 billion.² The California High-Speed Rail line is set to dislocate approximately 1,900 acres of land between Merced and Bakersfield.³ Of this property, roughly 1,460 acres are farmland.⁴ Land that lies where rail routes are proposed will likely have to be acquired by the California Rail Authority (“Rail Authority”) in order to begin construction.⁵ For land that will remain in private hands, nearly 2,445 to 3,860 acres of farmland state-wide listed as prime, important, or unique that will be affected by the project, the long-term effects of the project have come into great contention due to the extraordinary noise and vibration created by high-speed trains.⁶

¹ Tim Sheehan, *Path of High-Speed Rail Worries Valley Farmers*, FRESNO BEE, Jan. 8, 2011, <http://www.fresnobee.com/2011/01/08/2225457/rail-project-worries-valley-farmers.html>.

² *Id.*

³ *Id.*

⁴ *Id.*

⁵ See Cal. High-Speed Rail Auth., *Cal. High-Speed Train Map, Statewide Overview* (Apr. 2010), <http://www.cahighspeedrail.ca.gov/assets/0/152/198/81ea4dd6-afe8-4deebc13-a49899fc7df6.pdf> [hereinafter *Train Map*]; Cal. High-Speed Rail Auth., *Your Property, Your High-Speed Rail Project* (Nov. 2009), <http://www.cahighspeedrail.ca.gov/assets/0/152/198/327b34dd-7d14-4be3-963a-07e44e8605a8.pdf> [hereinafter *Your Property*] at 2.

⁶ U.S. Dep’t of Transp. Fed. R.R. Admin., *Record of Decision California High-Speed Train System* (2005), <http://www.cahighspeedrail.ca.gov/WorkArea/DownloadAsset.aspx?id=7612> [hereinafter *Record of Decision*] at 22, 27.

The high-speed rail has a high potential of disturbing farming because of the noise and vibration created by the trains.⁷ These local effects may include conversion of current agricultural land into a non-agricultural use.⁸ High-speed trains can generate noise as loud as, if not louder than, low-flying aircraft.⁹ This type of noise level can have a detrimental effect on nearby livestock, with the potential to cause injury or death due to panic flight.¹⁰ With the intense noise generated, the high-speed rail has the potential to greatly disturb the remaining farmlands either dislocated by or adjacent to the project.¹¹ This Comment will examine these effects in greater detail and ultimately conclude that some of these side effects constitute a taking within the context of California law.

This Comment will begin by examining the broad concepts of eminent domain and inverse condemnation. Part III will discuss the potential damages farmers will suffer from the excessive noise and vibration created by the high-speed rail. Part IV will explore rules for compensable damages under both eminent domain and inverse condemnation. Part V will then scrutinize whether noise pollution and vibration from the rail constitutes a taking or damaging of farmland such that farmers should be entitled to just compensation through severance damages or inverse condemnation. Lastly, this Comment will conclude that farmers who suffer an actual taking from the Rail Authority will be able to collect severance damages for injury to their remaining property, whereas farmers who have property adjacent to the rail and experience damages but suffer no tangible taking will be left with no remedy, and assess whether this is a fair outcome.

II. REMEDIES FOR TAKINGS AND DAMAGES

A. Federal Law Regarding Takings and Just Compensation

The Fifth and Fourteenth Amendments of the United States Constitution limit the government's ability to take private property.¹² The Fifth Amendment provides that no "private property be taken for public use, without just compensation,"¹³ meaning that the government cannot sim-

⁷ *Id.* at 27.

⁸ *Id.*

⁹ U.S. Dep't of Transp. Fed. R.R. Admin., *High-Speed Ground Transportation Noise and Vibration Impact Assessment* (Oct. 2005), http://www.fra.dot.gov/downloads/RRDev/final_nv.pdf [hereinafter *Impact Assessment*] at 3-2.

¹⁰ *Id.*

¹¹ *See id.*

¹² U.S. CONST. amend. V; U.S. CONST. amend. XIV § 1.

¹³ U.S. CONST. amend. V.

ply take land without paying for it in some way. The Fourteenth Amendment also states: “[N]or shall any State deprive any person of life, liberty, or property, without due process of law.”¹⁴ The Constitution clearly sets out that when a person’s land is taken by a state, the individual is entitled to just compensation and use of the legal system for an adequate remedy.¹⁵

B. What Constitutes a Taking?

There is a difference between a tortious invasion of a person’s property and “an appropriation of sufficient magnitude to amount to a taking.”¹⁶ What constitutes a “taking” as referred to in the Fifth Amendment is not abundantly clear.¹⁷ The Fifth Amendment requires that an adequate, certain, and reasonable measure to obtain compensation exist when a taking occurs.¹⁸ To be classified as a taking, there must be interference substantial enough to destroy a particular piece of property or lessen its value, though no concise rule exists that applies to all cases.¹⁹ “While the typical taking occurs when the government acts to condemn property in the exercise of its power of eminent domain, the entire doctrine of inverse condemnation is predicated on the proposition that a taking may occur without such formal proceedings.”²⁰

C. California Law Regarding Takings, Damaging, and Just Compensation

California law will be the ultimate rule applied to the takings and damages caused by the high-speed rail because the California government is the entity that is actually taking the land.²¹ The case law, statutes, and constitution of California are typically more generous towards landowners than other states’ or federal law because, in general, damage to properties that are adjacent to a publicly benefited project is compensable.²²

¹⁴ U.S. CONST. amend XIV § 1.

¹⁵ U.S. CONST. amend XIV § 1; U.S. CONST. amend V; *Williamson Cnty. Reg’l Planning Comm’n v. Hamilton Bank of Johnson City*, 473 U.S. 172, 194 (1985).

¹⁶ *Harris v. U.S.*, 467 F.2d 801, 803 (8th Cir. 1972).

¹⁷ *See Williamson*, 473 U.S. at 190.

¹⁸ *Id.* at 194.

¹⁹ *See Harris*, 467 F.2d at 803.

²⁰ *First English Evangelical Lutheran Church of Glendale v. Cnty. of L.A., Cal.*, 482 U.S. 304, 316 (1987).

²¹ *See Robinson v. Campbell*, 16 U.S. 212, 219 (1818).

²² *See Emeryville Redevelopment Agency v. Harcross Pigments, Inc.*, 125 Cal. Rptr. 2d 12, 29 (Cal. Ct. App. 2002); CAL. CODE CIV. PROC. § 1263.410(a) (West 2011).

The California Constitution sets out the law for eminent domain in article 1, section 19 by stating that “[p]rivate property may be taken or damaged for a public use and only when just compensation, ascertained by a jury unless waived, has first been paid to, or into court for, the owner.”²³

Though the majority of the property needed by the Rail Authority will be acquired by contractual transactions, an eminent domain lawsuit may be initiated if the Rail Authority and the landowner cannot come to an agreement on terms for the sale of the land.²⁴ The Rail Authority will begin with a survey of land, then choose a potential route, notify landowners, and begin a negotiation process with the landowners; most property acquisitions will be settled by contract.²⁵ If no agreement can be reached, the Rail Authority must initiate an eminent domain proceeding²⁶ where the property price is determined, paid, and title is transferred.²⁷

Property which is not actually taken but is directly damaged or depreciates as a direct result of the nearby rail is merely left with the remedy of an inverse condemnation suit.²⁸ This would apply to land that is adjacent to the high speed rail route but is not actually taken or purchased by the government.²⁹

1. Public Use

The California Code of Civil Procedure provides several statutes regarding eminent domain and just compensation.³⁰ For example, eminent domain may only be employed to acquire property for a public use.³¹ It is apparent that when a government takes land from a private landowner for public benefit, the individual must be justly compensated, including reimbursement for damage to the remaining property still under private control.³²

²³ CAL. CONST. art. 1, §19.

²⁴ *Your Property*, *supra* note 5, at 6.

²⁵ *See id.* at 2-6.

²⁶ *Id.* at 6.

²⁷ *See* Redevelopment Agency of the City of San Diego v. Mesdaq, 65 Cal. Rptr. 3d 372, 377 (Cal. Ct. App. 2007).

²⁸ *Oliver v. AT&T Wireless Services*, 90 Cal. Rptr. 2d 491, 497-498 (Cal. Ct. App. 1999).

²⁹ *See id.*

³⁰ *See* CAL. CODE CIV. PROC. § 1240.010 (West 2011); CAL. CODE CIV. PROC. § 1263.410(a) (West 2011); CAL. CODE CIV. PROC. § 1263.410(b) (West 2011); CAL. CODE CIV. PROC. § 1263.420 (West 2011).

³¹ CAL. CODE CIV. PROC. § 1240.010 (West 2011).

³² *See* CAL. CODE CIV. PROC. § 1263.410(a) (West 2011).

A property owner may recover for damage to his or her land only if the damage was a result of “an exercise of governmental power while seeking to promote ‘the general interest in its relation to any legitimate object of the government.’”³³ A public use, which would enable just compensation to a landowner, is one that affects the whole community, not just one person or a few individuals.³⁴ A use that is of general benefit or “by or for the government” is also a public use that would entitle a landowner to just compensation for the taking of his or her land.³⁵ In a lawsuit for inverse condemnation, the public agency will be found liable to the landowner for damages to his or her property if the damages occurred as a result of a public use, public work, or public improvement.³⁶ The construction of a high-speed rail throughout California would constitute a public use because as a means of public transportation, it would be a benefit to all citizens of the state and would be available to the general public.³⁷

2. *Eminent Domain: The Government’s Remedy*

A condemning authority, usually the government, can take property by initiating a condemnation action.³⁸ In a condemnation proceeding, a condemning authority asserts its power of eminent domain to acquire title to the property and influence a taking.³⁹ In this course of action, a taking occurs when just compensation has been determined and is paid to the property owner.⁴⁰ The property is appraised at the time of the taking, and since the taking occurs during the course of proceedings in a condemnation suit, the property value is relatively current.⁴¹ Regarding high-speed rail, if a landowner refused to sell his or her property to the Rail Authority, a condemnation lawsuit will be prepared and filed by the Rail Authority with the county court where the property is located.⁴²

³³ *City of Los Angeles v. Superior Court*, 124 Cal. Rptr. 3d 499, 506 (Cal. Ct. App. 2011).

³⁴ *See id.*

³⁵ *See id.*

³⁶ *Skoumbas v. City of Orinda*, 81 Cal. Rptr. 3d 242, 250 (Cal. Ct. App. 2008).

³⁷ *See City of Los Angeles*, 124 Cal. Rptr. 3d at 506.

³⁸ *See id.*

³⁹ *Redevelopment Agency of the City of San Diego v. Mesdaq*, 65 Cal. Rptr. 3d 372, 377 (Cal. Ct. App. 2007).

⁴⁰ *Id.* at 377-378.

⁴¹ *See id.*

⁴² *Your Property*, *supra* note 5, at 7.

3. *Inverse Condemnation: The Landowner's Remedy*

A condemning authority can also take a property by invasion, which would lead to an inverse condemnation suit brought by the landowner.⁴³ An inverse condemnation suit may be established where there is mere damage to the property, a temporary invasion, or even when no physical invasion occurs.⁴⁴ A landowner may institute inverse condemnation proceedings when the government has failed to file an eminent domain suit to compensate the landowner for damages or takings of the property that have occurred due to a public improvement project.⁴⁵ These proceedings are implemented when a taking has occurred but the government has not filed an action prior to the taking, nor reimbursed the property owner for his or her land.⁴⁶

A “taking” or “damaging” of land is required to initiate an inverse condemnation proceeding.⁴⁷ Property is taken or damaged when one of the three following criteria are met: the land suffers a physical invasion in a tangible manner; there is physical damage to the property although no physical invasion occurred; or “an intangible intrusion onto the property has occurred which has caused no damage to the property but places a burden on the property that is direct, substantial, and peculiar to property itself.”⁴⁸

The California Constitution requires that just compensation be paid for any private property that is taken or damaged for public use, providing the basis for an inverse condemnation lawsuit.⁴⁹ To succeed in a suit for inverse condemnation, “the property owner must show there was an invasion or appropriation (a ‘taking’ or ‘damaging’) of some valuable property right which the property owner possesses by a public entity and the invasion or appropriation directly and specially affected the property owner to his injury.”⁵⁰ A landowner may recover under inverse condemnation where his or her ability to access his or her property is impaired by a public entity or public works project.⁵¹ A government agency will be liable to a property owner where a substantial cause-and-effect rela-

⁴³ *City of Los Angeles v. Superior Court*, 124 Cal. Rptr. 3d 499, 506 (Cal. Ct. App. 2011).

⁴⁴ *Id.*

⁴⁵ *Skoumbas v. City of Orinda*, 81 Cal. Rptr. 3d 242, 248 (Cal. Ct. App. 2008).

⁴⁶ *See generally City of Los Angeles*, 124 Cal. Rptr. 3d at 506.

⁴⁷ *Oliver v. AT&T Wireless Services*, 90 Cal. Rptr. 2d 491, 497 (Cal. Ct. App. 1999).

⁴⁸ *Dina v. People ex. rel Dept. of Transp.*, 60 Cal. Rptr. 3d 559, 574-575 (Cal. Ct. App. 2007).

⁴⁹ *Hauselt v. City of Butte*, 91 Cal. Rptr. 3d 343, 348 (Cal. Ct. App. 2009).

⁵⁰ *See City of Los Angeles*, 124 Cal. Rptr. 3d at 506.

⁵¹ *Id.* at 507.

tionship can be established by the landowner between the state sponsored improvements and the damage to the landowner's property, as long as other forces alone did not trigger the injury.⁵² In an action for inverse condemnation, the result is not always that the public entity acquired private property, unlike most eminent domain proceedings.⁵³

"When incidental damage to private property is caused by governmental activity, but the government has not reimbursed the property owner," as required by state constitution, "a suit in 'inverse condemnation' will lie to recover monetary damages for 'special injury.'"⁵⁴ A remedy of inverse condemnation is predicated on the constitutional requirement that just compensation must be provided to the owner of a property when a government entity takes or damages the private land for a public use.⁵⁵ The first issue a property owner must establish in an inverse condemnation proceeding is that a government agency or public entity has actually taken or damaged his or her private property.⁵⁶ After establishing a taking has in fact occurred, the land owner can then move on to the issue of just compensation.⁵⁷

III. TAKINGS FROM AND DAMAGES TO FARMERS

A. *Agricultural Land Will Need to Be Acquired to Build the High-Speed Rail Tracks*

In order to build a high-speed rail system through California, land will need to be acquired for rails to be constructed.⁵⁸ This will necessarily displace current landowners and occupiers.⁵⁹ A large majority of land designated for the rail route is currently used for agriculture, meaning that farmers and their crops and herds stand to be affected by the construction of this high-speed rail system.⁶⁰ Farmers will be affected economically by the actual taking of their agriculture land for use as the rail route and their herds will be damaged or disturbed by the noise and vibrations created by the moving trains.⁶¹ Not only do farmers stand to

⁵² *Skoumbas v. City of Orinda*, 81 Cal. Rptr. 3d 242, 250 (Cal. Ct. App. 2008).

⁵³ *See City of Los Angeles*, 124 Cal. Rptr. 3d at 506.

⁵⁴ *See Skoumbas*, 81 Cal. Rptr. 3d at 248.

⁵⁵ *See City of Los Angeles*, 124 Cal. Rptr. 3d at 505-506.

⁵⁶ *See City of Los Angeles*, 124 Cal. Rptr. 3d at 506.

⁵⁷ *Id.*

⁵⁸ *See generally Train Map*, *supra* note 5; *Your Property*, *supra* note 5, at 2.

⁵⁹ *Train Map*, *supra* note 5; *Your Property*, *supra* note 5, at 2.

⁶⁰ *See generally Train Map*, *supra* note 5.

⁶¹ *See C.E. Hanson, High Speed Train Noise Effects on Wildlife and Domestic Livestock*, 99 NOISE AND VIBRATION MITIGATION FOR RAIL TRANSPORTATION SYSTEMS (Notes

lose land, they will also suffer other hardships that could be compensable.⁶² The Rail Authority has the responsibility to study sites that could potentially be the rail route and the Rail Authority Board will ultimately make the decision on where the high-speed train system tracks will be laid and what structures and related facilities will accompany them.⁶³

B. The Noise and Vibrations Created by the Rail System Will Have an Adverse Affect on Livestock and Crops

There has been some research regarding the effects of noise disturbances from transportation sources on wild and domestic animals, but it has been inconclusive.⁶⁴ However, there have been observed effects caused by low-flying aircraft, which may be similar to effects caused by high-speed trains.⁶⁵ Low-flying aircraft can generate 100 dBA,⁶⁶ whereas high-speed trains can produce noise of 95 dBA or greater,⁶⁷ making the studies and case law created from airports as a source of noise analogous to the damages and remedies created from the noise and vibrations of the high-speed rail.

The noise and vibrations that the rail will create will most certainly be harmful to herds.⁶⁸ Noise created by the high-speed rail system is generated by three sources: “the electronic propulsion system, wheel/rail interactions, and aerodynamic sound produced from airflow moving past the train.”⁶⁹ The first two sources of sound are prevalent at speeds of 160

on Numerical Fluid Mechanics and Multidisciplinary Design), 26, 29 (2008), available at <http://www.springerlink.com/content/62628jg1x28338um/fulltext.pdf>, DOI: 10.1007/978-3-540-74893-9_4; See U.S. Dep’t of Interior, Eng’g and Services Ctr, U.S. Air Force, Fish and Wildlife Serv., AD-A201 966, *Effects of Aircraft Noise and Sonic Booms on Domestic Animals and Wildlife: A Literature Synthesis* (Nov. 1988), available at http://www.fs.fed.us/t-d/programs/im/sound_measure/Manci_et_al_1988.pdf pg. 17, 71 [hereinafter *Effects of Aircraft Noise*].

⁶² See *id.*

⁶³ *Your Property*, *supra* note 5.

⁶⁴ Hanson, *supra* note 61, at 27.

⁶⁵ *Id.*

⁶⁶ “The basic unit to describe sound or noise either measured or calculated is the **decibel or dB**. To better account for human sensitivity to noise, decibels are measured as a weighted measure of sound, abbreviated as dBA, which mimics the human perception of sound, more sensitive at higher frequencies and less sensitive at lower frequencies.” Cal. High-Speed Rail. Auth., Cal. High-Speed Train Project, *High-Speed Train Sound Fact Sheet* (Aug. 2010), available at <http://www.cahighspeedrail.ca.gov/assets/0/152/198/1efc92bd-1ce9-4514-bb8c-be51d1320488.pdf> [hereinafter *Fact Sheet*] at 3.

⁶⁷ See Hanson, *supra* note 61, at 30.

⁶⁸ See Hanson, *supra* note 61, at 27, 31.

⁶⁹ *Fact Sheet*, *supra* note 66, at 2.

mph or less, but for speeds above 160 mph, the aerodynamic sound from airflow is the main source of noise.⁷⁰ Many factors contribute to the level of noise that is audible at different locations.⁷¹ The noise level, which is audible to a listener at any given location, will be influenced by different factors, including: the kind of ground surface, the presence or absence of buildings or other sound barriers, and the distance between a source of noise and the listener.⁷² Sound barriers can be effective for minimizing noise disruptions caused by the high-speed rail.⁷³

The possible side effects of noise and vibrations on livestock herds could be tremendously detrimental.⁷⁴ The best and most useful predictor of animal responses to noise is the sound exposure level.⁷⁵ The impact of noise on animals needs further research, but a negative reaction is very likely:

[F]or animals, the effects are not easily determined. Usually the studies require introduction of a specific noise event like an aircraft overflight and a subsequent observation of animal response. Observations of response to noise exposure have ranged from no reaction or mild responses such as slight changes in body position to extreme responses such as panic and attempts to escape . . . Long term effects continue to be a matter of speculation . . . [A]ny criteria adopted for effects on animals by high-speed rail noise must be considered interim until further specific research results are known.⁷⁶

Sudden loud noises can frighten animals and have been known to bring out the “fight or flight” response, which may result in animals trying to flee the source of the noise and becoming injured by an impulsive movement or a stampede.⁷⁷ Moving, stampeding, trampling, jumping, running, and raising the head are common responses of mammals that were exposed to a sonic boom noise.⁷⁸ A sudden or strange sound can act like an alarm, creating a stress reaction that varies from species to species.⁷⁹ If an animal is subjected to a lengthy period of severe stress, it could possibly result in death by physical exhaustion.⁸⁰

⁷⁰ *Id.*

⁷¹ *Id.* at 6.

⁷² *Id.*

⁷³ *Id.* at 10.

⁷⁴ See *Impact Assessment*, *supra* note 9, at A-22.

⁷⁵ *Id.* at A-23.

⁷⁶ *Id.* at A-22.

⁷⁷ Hanson, *supra* note 61, at 27.

⁷⁸ *Effects of Aircraft Noise*, *supra* note 61, at 15.

⁷⁹ *Id.* at 14.

⁸⁰ *Id.*

Dairy cows can be greatly affected by noise.⁸¹ At 105 dB, they have reduced milk production, and at 97 dB and 110 dB, their blood composition changes.⁸² In one study, milk production ceased immediately after paper bags were exploded every ten seconds for two minutes, and, thirty minutes after the noise had ceased, milk production was only seventy percent of normal.⁸³ Noise can have an adverse effect on chickens as well.⁸⁴ At 100 dB, their blood composition changes, and at 115 dB, their brooding is interrupted.⁸⁵ A response of violent behavior was elicited from chickens exposed to intermittent sound at 100-118 dB.⁸⁶ The animals' panic crowding ultimately led to a chick being smothered by the group.⁸⁷ Swine are negatively affected by noise at 93 dB by a change in hormones and at 120-135 dB by an increase in heart rate.⁸⁸ At 90 dB, sheep experience decreased thyroid activity and at 100 dB, they have an increase in heart rate and respiration,⁸⁹ along with a lowered feeding efficiency.⁹⁰ Turkeys also experience detrimental effects caused by noise.⁹¹ At 100 dB, these animals begin panic crowding.⁹² After being exposed to jet noise, goats encountered a reduction in milk yield.⁹³ In response to sounds of 107-119 dB, honey-bees stopped their movement for twenty minutes, and did not generally habituate to the loud noise.⁹⁴ Noise has been shown to have a negative impact on animals in several ways, including decreasing production of milk, increasing secretion of hormones, and eliciting a cessation of movement.⁹⁵

"There is evidence that some animals demonstrate reduced response to noise after prior exposure, but that few species become accustomed to, or habituate, to high noise levels."⁹⁶ Livestock and other farm raised animals exposed to the loud and frightening sounds of the high-speed rail may become more familiar with the noise, but that does not mean it will

⁸¹ See *Impact Assessment*, *supra* note 9, at A-24.

⁸² *Id.*

⁸³ *Effects of Aircraft Noise*, *supra* note 61, at 24.

⁸⁴ *Id.* at 47.

⁸⁵ *Id.* at 48.

⁸⁶ *Id.* at 47.

⁸⁷ *Id.*

⁸⁸ Hanson, *supra* note 61, at 29.

⁸⁹ *Id.*

⁹⁰ *Effects of Aircraft Noise*, *supra* note 61, at 18.

⁹¹ See Hanson, *supra* note 61, at 29.

⁹² *Id.*

⁹³ *Effects of Aircraft Noise*, *supra* note 61, at 17.

⁹⁴ *Id.* at 71.

⁹⁵ Hanson, *supra* note 61, at 29; *Effects of Aircraft Noise*, *supra* note 61, at 17, 71.

⁹⁶ *Impact Assessment*, *supra* note 9, at A-23.

not negatively affect them and create a detrimental consequence to the farmer.⁹⁷

However, there is some evidence that the noise and vibrations caused by the high-speed rail may cause little to no interference with farm production.⁹⁸ Some animals have lived near highways, maglev tracks, and railroads without negative repercussions.⁹⁹ For example, cows frequently graze near a maglev track in Germany and antelope roam around a railroad test track in Colorado.¹⁰⁰ After being subjected to sonic booms, the reaction of livestock has been a minimal startle reaction.¹⁰¹ “When compared to freeway noise high-speed train noise is heard as a very short duration single-event sound as compared to the more constant level of freeway noise which increases in level when heavy trucks, motor cycles or diesel buses passby.”¹⁰² Having short bursts of noise from the rail as opposed to an almost never-ending, continuous stream of sound produced from highways may not be so detrimental.¹⁰³ The high-speed rail will not be in service from midnight to five a.m.,¹⁰⁴ reducing stress for non-nocturnal animals by allowing uninterrupted sleep. Though the high-speed rail will undoubtedly create vibrations, studies have shown that people outdoors are not generally annoyed by ground-borne vibrations, reducing the probability that animals and crops could be damaged from the annoyance.¹⁰⁵

The evidence regarding the noise effect on animals is somewhat contradictory and inconclusive.¹⁰⁶ However, it is more likely that livestock and poultry will be negatively impacted by the sounds and vibrations caused by the high-speed rail because their production levels could decrease and they will not habituate to the interspersed, sudden loud interruptions that the high-speed train will create.¹⁰⁷ These probable harmful effects on livestock will inflict damages on farmers because they will ultimately suffer injuries to their animals and profits, as well as a diminu-

⁹⁷ *Id.*; See Hanson, *supra* note 61, at 29.

⁹⁸ See *Impact Assessment*, *supra* note 9, at A-23.

⁹⁹ Hanson, *supra* note 61, at 27.

¹⁰⁰ *Id.*

¹⁰¹ *Effects of Aircraft Noise*, *supra* note 61, at 24.

¹⁰² *Fact Sheet*, *supra* note 66, at 7.

¹⁰³ See *Effects of Aircraft Noise*, *supra* note 61, at 24.

¹⁰⁴ *Fact Sheet*, *supra* note 66, at 7.

¹⁰⁵ See *Impact Assessment*, *supra* note 9, at 6-2, A-24.

¹⁰⁶ Hanson, *supra* note 61, at 27.

¹⁰⁷ See Hanson, *supra* note 61, at 29, 31; *Effects of Aircraft Noise*, *supra* note 61, at 17.

tion in land value from the noise and vibrations created by the high-speed rail.¹⁰⁸

IV. WHAT ARE THE AVAILABLE DAMAGES?

When property is taken by a government body, its value is to be ascertained as of the date of the taking.¹⁰⁹ When a government has already taken all use of a property by its activities, the government must provide just compensation for the landowner, and no subsequent action can alleviate it of this responsibility to compensate for the time period for which the taking was effective.¹¹⁰ The value of the land that has been taken is measured by the landowner's loss and not by the gain of the taker.¹¹¹ Compensation for property that is taken is the fair market value of that property, with consideration for what it is used for and what it could potentially be used for.¹¹² When a physical invasion is used for a taking, the property value on the date of invasion is used to calculate damages, not the current value of the land.¹¹³

In order to acquire a landowner's property, the California Rail Authority has stated that it will pay the fair market value of said property.¹¹⁴ Fair market value is considered to be:

The highest price on the date of valuation that would be agreed to by a seller, being willing to sell but under no particular or urgent necessity for so doing, nor obliged to sell, and a buyer, being ready, willing and able to buy but under no particular necessity for so doing, each dealing with the other with full knowledge of all the uses and purposes for which the property is reasonably adaptable and available.¹¹⁵

The Rail Authority will pay for the land that it actually purchases as well as any losses in market value to property remaining in the landowner's possession.¹¹⁶

¹⁰⁸ Hanson, *supra* note 61, at 29; *Effects of Aircraft Noise*, *supra* note 61, at 17; *See generally* People ex rel. Dept. Pub. Works v. Volunteers of America, 98 Cal. Rptr. 423, 434-435 (Cal. Ct. App. 1971) (a loss in the available uses of the land equates to a loss in the value of land).

¹⁰⁹ Redevelopment Agency of San Diego v. Mesdaq, 65 Cal. Rptr. 3d 372, 377 (Cal. Ct. App. 2007).

¹¹⁰ Skoumbas v. City of Orinda, 81 Cal. Rptr. 3d 242, 248 (Cal. Ct. App. 2008); *see* First English Evangelical Lutheran Church of Glendale v. Cnty. of L.A., Cal., 482 U.S. 304, 319 (1987).

¹¹¹ *See Glendale* 482 U.S. 304 at 319.

¹¹² Pac. Gas and Electric Co. v. Hufford, 319 P.2d 1033, 1041 (Cal. 1957).

¹¹³ *See Mesdaq*, 65 Cal. Rptr. 3d at 377.

¹¹⁴ *Your Property*, *supra* note 5, at 4.

¹¹⁵ *Id.* at 9.

¹¹⁶ *Id.* at 4.

A. *Eminent Domain: Severance Damages from Noise*

A landowner will be awarded damages for injury to his or her remaining property as well as compensation for the part taken, if the property which is acquired is part of a bigger parcel.¹¹⁷ “Compensation for injury to the remainder is the amount of damage to the remainder reduced by the amount of the benefit to the remainder.”¹¹⁸ Section 1263.420 of the California Code of Civil Procedure states:

Damage to the remainder is the damage, if any, caused to the remainder by either or both of the following:

(a) The severance of the remainder from the part taken.

(b) The construction and use of the project for which the property is taken in the manner proposed by the plaintiff whether or not the damage is caused by a portion of the project located on the part taken.¹¹⁹

A condemning party may have to pay the decrease in the property’s market value caused by the taking.¹²⁰ In awarding damages, a jury may consider the effect of a taking on adjacent property, such as damages that will affect a portion of a larger parcel of land that is not sought to be condemned.¹²¹ A landowner could be owed damages if the property remaining under the owner’s control has a decreased market value.¹²² California allows severance damages by proving the market value of the land remaining in the landowner’s possession both before the taking, and after the land is acquired.¹²³ A property owner may only collect compensation for injuries created by the public use on his or her land alone.¹²⁴ To be compensable, the injury must be specific to the landowner and not a general grievance suffered by all property owners in the vicinity.¹²⁵

When private land is condemned for public use under eminent domain, the landowner is entitled to compensation for the land directly taken and for severance damages.¹²⁶ Severance damages consist of the injuries sustained by the remaining property which results from it being severed

¹¹⁷ CAL. CODE CIV. PROC. § 1263.410(a) (West 2011).

¹¹⁸ CAL. CODE CIV. PROC. § 1263.410(b) (West 2011).

¹¹⁹ CAL. CODE CIV. PROC. § 1263.420 (West 2011).

¹²⁰ Pac. Gas and Elec. Co. v. Hufford, 319 P.2d 1033, 1037 (Cal. 1957).

¹²¹ *Id.* at 1036.

¹²² *Id.* at 1038.

¹²³ *Id.*

¹²⁴ City of Berkeley v. von Adelung, 29 Cal. Rptr. 802, 803 (Cal. Ct. App. 1963).

¹²⁵ *Id.*

¹²⁶ People ex rel. Dept. Pub. Works v. Volunteers of America, 98 Cal. Rptr. 423, 427 (Cal. Ct. App. 1971).

from the part of the property actually taken by the government agency.¹²⁷ If the taking responsible for damage to adjacent land is built upon land taken from claimant, severance damages may include a loss in the property value.¹²⁸ In *People ex rel. Dept. Pub. Works v. Volunteers of America*, 98 Cal. Rptr. 423 (Cal. Ct. App. 1971), 233 square feet of land was taken by the state for freeway purposes, but the only plan for the property was to erect a fence.¹²⁹ The court held that if a tangible damage is caused to the remaining property not taken for public use, damages may be compensable.¹³⁰ The court also decided that it should be irrelevant whether the public work that caused the damage to remaining land was totally, partially or in no way located on the land taken.¹³¹ The court reasoned that severance damages may only be awarded when the property suffers a diminution in substance, or is deemed to be inherently less valuable because of the taking.¹³² When there is an interference with some right of a property owner that makes the property intrinsically less valuable, the landowner has suffered a damage which is compensable.¹³³ The court ultimately held that since a portion of the claimant's property had been taken, they were entitled to severance damages for the adjacent property if the damages could be proven.¹³⁴

In the instant circumstances, farmers who suffer a loss due to the noise and vibrations of the high-speed rail, causing a diminished capacity of livestock production, should be entitled to collect severance damages because their property value has decreased due to the limitation on activities that could now be performed on the land. This is analogous to the landowners' arguments in *Volunteers*, where activities on the remaining property were limited due to the public use of the property taken, and the landowners were awarded severance damages because this limitation caused a demonstrated diminution in property value.¹³⁵ If a farmer's agricultural ability is uniquely limited on his remaining property because of the noise and vibrations created by the high-speed rail, he is entitled to just compensation for severance damages.¹³⁶ If the property becomes intrinsically less valuable due to the limitation of activities available to

¹²⁷ *Id.*

¹²⁸ *Id.* at 431.

¹²⁹ *Id.* at 425.

¹³⁰ *Id.* at 427.

¹³¹ *Id.*

¹³² *Id.* at 430.

¹³³ *Id.*

¹³⁴ *Id.* at 435.

¹³⁵ *Id.* at 434-435.

¹³⁶ *Id.* at 427.

be performed on the property, then severance damages should be paid to the landowner.¹³⁷

However, because all farming property owners in the vicinity will experience the general grievance of the detrimental effects of the noise and vibrations on their animals, it may not be a compensable damage.¹³⁸ This is different than *Volunteers*, where the property owners were all affected by one freeway extension that decreased property values in a specific area and not a state-wide transportation system which will affect a great number of people throughout California.¹³⁹

B. Prevailing Rules of Proximity Damage

If adjacent property is damaged by an intangible intrusion, there is only recovery for a property owner whose land was actually taken, however slight, and the injury producing activity was performed upon this land; there is no recourse for an individual who suffers damages from an intangible taking whose land has not been taken.¹⁴⁰ “There can be no recovery where there has been no actual taking or severance of the claimant’s property,” as when adjacent property is damaged by general factors like noise.¹⁴¹ This is unfair, since adjacent property to a public improvement is damaged just the same by the improvement regardless of if property is physically taken or not.¹⁴²

The addition of noise and vibration to a farm as a result of the taking is likely to have a detrimental effect on animals.¹⁴³ In *Pacific Gas and Electric Co. v. Hufford*, 319 P.2d 1033 (Cal. 1957), Pacific Gas & Electric Company initiated an eminent domain action against Hufford to erect an electric transmission line on his property that was used for cattle.¹⁴⁴ Hufford experienced damage to his remaining property and the loss of use of that property.¹⁴⁵ For example, a cattle expert testified that some animals “will not gain weight for quite a while under a power line because the noise (‘buzzing’) disturbs them and they won’t bed down under it . . . how long it takes them to become used to a power line ‘depends on

¹³⁷ *Id.* at 430.

¹³⁸ *City of Berkeley v. von Adelung*, 29 Cal .Rptr. 802, 803 (Cal. Ct. App. 1963).

¹³⁹ *See Volunteers*, 98 Cal. Rptr. at 425.

¹⁴⁰ *Id.* at 431.

¹⁴¹ *Id.* at 431-432.

¹⁴² *Id.* at 435; Juliet Cox, *Continental Development Alters “Just Compensation” Definition Under California Law*, 28 J. REAL. EST. TAX’N 3, 25 (Fall 2000).

¹⁴³ Hanson, *supra* note 61, at 29; *Effects of Aircraft Noise*, *supra* note 61, at 17.

¹⁴⁴ *Pac. Gas and Electric Co. v. Hufford*, 319 P.2d 1033, 1034 (Cal. 1957).

¹⁴⁵ *Id.* at 1039.

where they come from and the personality.’”¹⁴⁶ The court held that Hufford was entitled to severance damages and that it was acceptable to consider the most profitable use for which the property may be utilized when calculating compensation.¹⁴⁷

To succeed in a severance damages suit, a farmer affected by the high-speed rail project could prove a loss in property damage by demonstrating the property value before the land was taken and then establishing that there has been a diminution in its value as a result of the noise and vibrations created by the rail, thus creating limitations on the land’s use.¹⁴⁸ This matches closely to the holding in *Hufford*, where the landowner was awarded severance damages because his ability to raise cattle was greatly affected by the public improvement.¹⁴⁹

Both *Volunteers* and *Hufford* establish that severance damages are routinely awarded to individual land owners who suffer a tangible taking and then experience harm and injuries on their remaining property due to the public use carried out on the land that was physically taken.¹⁵⁰

C. Inverse Condemnation: What Constitutes “Damages” From Noise or Vibration?

Excessive noise may be considered a taking if it interferes with the use of land of a property owner.¹⁵¹ With the “growing problem of noise pollution . . . , excessive noise must be considered a degradation of our environment and a health hazard to our citizens.”¹⁵²

When there is an intangible intrusion on a property and a plaintiff initiates an inverse condemnation lawsuit, the burden is on the plaintiff to establish that his or her loss was a result of the intangible intrusion and that the damage to the property was peculiar, direct, and substantial.¹⁵³ A decline in property value alone does not establish an inverse condemnation action because it is not a taking or damaging, but a diminution may be considered as an element in measuring just compensation when a tak-

¹⁴⁶ *Id.* at 1041.

¹⁴⁷ *Id.* at 1043-1044.

¹⁴⁸ *See Dina v. People ex. rel. Dept. of Transp.*, 60 Cal. Rptr. 3d 559, 576 (Cal. Ct. App. 2007).

¹⁴⁹ *See Hufford*, 319 P.2d at 1041-1042.

¹⁵⁰ *See id.* at 1041; *See also People ex rel. Dept. Pub. Works v. Volunteers of America*, 98 Cal. Rptr. 423, 431 (Cal. Ct. App. 1971).

¹⁵¹ *See Dina*, 60 Cal. Rptr. 3d at 576.

¹⁵² CAL. HEALTH & SAFETY CODE § 118825.

¹⁵³ *Oliver v. AT&T Wireless Services*, 90 Cal. Rptr. 2d 491, 497-498 (Cal. Ct. App. 1999).

ing or damaging has been established.¹⁵⁴ In *Oliver v. AT&T Wireless Services*, 90 Cal. Rptr. 2d 491 (Cal. Ct. App.1999), the plaintiffs sued their neighbors who leased land to cell phone companies to erect towers on the property and the cell phone companies themselves.¹⁵⁵ The towers created a strumming noise and a sporadic hum sound (that could not be heard from inside the house), but there was no actual material damage to the property.¹⁵⁶ The court ruled that a burden to adjacent property is direct and substantial if the harmed property owner can show that the “consequences of the intangible intrusion are ‘not far removed’ from a direct physical intrusion.”¹⁵⁷ The court held that noise has been shown “to be sufficiently analogous to a direct physical” invasion to establish a cause of action under inverse condemnation.¹⁵⁸ The court ultimately decided that the plaintiffs failed to show a substantial burden to their property.¹⁵⁹

In the current circumstances of the high-speed rail, farmers who will suffer decreased herd or crop production or quality due to the sound disturbance of the rail and therefore a reduction in profits, can claim they have suffered damages analogous to a physical invasion and should be entitled to recoup those lost earnings through just compensation.¹⁶⁰ *Oliver* is distinguishable from the current situation because the plaintiffs in the case suffered injuries due to an intangible intrusion of a strumming noise, but were unable to prove compensable damages to the property.¹⁶¹ In the instant case, farmers could employ modern technology to measure the decibels of noise on their property and compare the production and characteristics of their farm animals and crops both before and after the high-speed rail commences to record the effect of the noise and vibrations created by the rail on the property, thus establishing actual damages suffered.¹⁶²

In *Dina v. People ex. Rel Dept. of Transportation*, 60 Cal. Rptr. 3d 559 (Cal. Ct. App. 2007), the plaintiffs, residential property owners, brought suit for inverse condemnation due to noise and vibrations created by a freeway extension.¹⁶³ The plaintiffs suffered structural damage including

¹⁵⁴ *Id.* at 496-497.

¹⁵⁵ *Id.* at 491.

¹⁵⁶ *Id.* at 495.

¹⁵⁷ *Id.* at 498.

¹⁵⁸ *Id.*

¹⁵⁹ *Id.* at 499.

¹⁶⁰ *See generally id.* at 498.

¹⁶¹ *See id.* at 499.

¹⁶² *See id.* at 497-498.

¹⁶³ *Dina v. People ex. Rel Dept. of Transp.*, 60 Cal. Rptr. 3d 559, 563 (Cal. Ct. App. 2007).

settling and cracks in floors.¹⁶⁴ The court held that liability may be established when the public works project was not the only cause of damage, but a substantial concurring cause of the harm suffered.¹⁶⁵ The damage complained of must not be common to all property in the vicinity and there must be a substantial cause-effect between the damage and the intangible intrusion.¹⁶⁶ The court decided that a unique damage from noise due to close proximity to the source may be established through modern measurement techniques.¹⁶⁷ The court ultimately ruled that the plaintiffs did not have enough evidence to establish a peculiar, substantial, or direct burden.¹⁶⁸

The noise and vibrations caused by the high-speed rail are dissimilar to *Dina*, where the property owners were unable to prove a unique damage from the noise of the nearby freeway extension.¹⁶⁹ Here, farmers could show a substantial burden because they would not be able to enjoy the same use of their property after the rail is built due to the noise and vibrations having a distinct negative effect on the animals raised on these farms, and ultimately leading to a decrease in production and a loss in profits for farmers.¹⁷⁰

The current circumstances are, however, similar to *Dina*, where the property owners in an inverse condemnation lawsuit could not collect compensation for damages from a freeway extension.¹⁷¹ Many farms and dairies are currently located on property adjacent to freeways or highways and the animals are able to produce sufficiently to sustain the business.¹⁷² The added noise and vibrations from the high-speed rail will most likely not affect the animals any more than noise from nearby freeways; therefore, farmers would not suffer damages which are compensable.¹⁷³

¹⁶⁴ *Id.* at 563-564.

¹⁶⁵ *Id.* at 575.

¹⁶⁶ *Id.*

¹⁶⁷ *Id.* at 576.

¹⁶⁸ *See id.* at 575.

¹⁶⁹ *Id.*

¹⁷⁰ *See generally* Hanson, *supra* note 61, at 29; *See also* *Effects of Aircraft Noise*, *supra* note 61, at 17, 71.

¹⁷¹ *See Dina*, 60 Cal. Rptr. 3d at 576.

¹⁷² *See generally* *Dairy Manure Collaborative*, U.S. Env'tl. Prot. Agency, (Last visited Oct. 8, 2011, 8:50 PM), <http://mappery.com/map-of/Dairy-Locations-and-Herd-Size-for-Central-Vally-of-California-Map>.

¹⁷³ *See generally* *Fact Sheet*, *supra* note 66, at 4 fig. 1.

D. What Should Farmers Do Now?

In order to bolster their argument that the damages sustained are compensable, farmers should immediately begin recording current production, feeding, breeding, and other relevant behavior levels of their animals.¹⁷⁴ Farmers will need these statistics in order to compare them with levels after the high-speed rail begins to operate.¹⁷⁵ Having records of the statistics both before and after the rail commences will aid in substantiating later claims of severance damages or inverse condemnation, and make compensation more likely.¹⁷⁶

Farmers should also be cognizant of any statutes of limitations that apply to inverse condemnation and severance damages proceedings so the proceedings are not barred by the passage of time.¹⁷⁷ California law only gives landowners five years to file suit for damages to their property once the injury has occurred.¹⁷⁸ Therefore, farmers who suffer incidental damages as a result of the high-speed rail noise and vibrations will need to file a claim for either severance damages or inverse condemnation expeditiously.¹⁷⁹

V. CAN FARMERS RECOVER JUST COMPENSATION?

There are arguments in support of and against compensation being awarded to farmers whose land is partially taken and suffer damages to the remainder and also farmers who suffer damages to their property though no actual invasion or physical taking occurred.

A. Eminent Domain: Farmers Who Suffer a Physical Taking May Seek Compensation for Damages to the Remainder of Their Property

1. Consideration of Potential for Damages

Landowners who suffer a taking by the Rail Authority should be able to collect compensation for damages that occur on their remaining property, including a remedy for the decrease in their remaining property value, if they are able to prove the damages.¹⁸⁰ A landowner will have to

¹⁷⁴ See generally *Oliver v. AT&T Wireless Services*, 90 Cal. Rptr. 2d 491, 497-498 (Cal. Ct. App. 1999).

¹⁷⁵ See generally *id.*

¹⁷⁶ See generally *id.*

¹⁷⁷ CAL. CODE CIV. PROC. § 318 (West 2011).

¹⁷⁸ CIV. PROC. § 318.

¹⁷⁹ CIV. PROC. § 318.

¹⁸⁰ See *Pac. Gas and Electric Co. v. Hufford*, 319 P.2d 1033, 1038 (Cal. 1957).

establish the market value of the property both before and after the taking to determine damages.¹⁸¹ Property owners should be entitled to just compensation for this loss in value to their property because California allows severance damages.¹⁸²

However, it is possible that farmers will not be entitled to severance damages after suffering a taking from the Rail Authority because the harms they suffer from the noise and vibrations of the high-speed rail on their remaining property will not be specific to them, but will be suffered by all similar types of agricultural landowners.¹⁸³

In order to qualify for just compensation, an injury must be specific to a property owner, so a grievance suffered by all landowners in the vicinity will not be compensable.¹⁸⁴ Just as all houses located on busy streets experience traffic, all farms and ranches located near the rail line will experience noise and vibrations.¹⁸⁵ They are not entitled to compensation just because their property location experiences annoyances.¹⁸⁶ If damage to farm animals occurs due to the noise or vibrations caused by the high-speed rail, it most likely will not be unique to one farm and may be suffered by all farms in the vicinity, making it non-compensable.¹⁸⁷

2. Severance Damages Will be Awarded

Farmers who experience a tangible taking by the rail authority and then suffer damages to the remainder of their property are entitled to collect severance damages under California law because the land will become intrinsically less valuable and undesirable for the activity which currently takes place on it, such as animal husbandry and pollination crop farming.¹⁸⁸

¹⁸¹ See *id.*

¹⁸² See *id.*

¹⁸³ *City of Berkeley v. von Adelung*, 29 Cal. Rptr. 802, 803 (Cal. Ct. App. 1963).

¹⁸⁴ See *id.*

¹⁸⁵ See generally *Hanson*, *supra* note 61, at 30.

¹⁸⁶ *People ex rel. Dept. Pub. Works v. Volunteers of America*, 98 Cal. Rptr. 423, 430 (Cal. Ct. App. 1971).

¹⁸⁷ See *von Adelung*, 29 Cal. Rptr. at 803.

¹⁸⁸ See generally *Effects of Aircraft Noise*, *supra* note 61, at 17, 71.

B. Inverse Condemnation: Farmers Who Suffer Damages to Their Property Even Though No Physical Invasion or Tangible Taking Occurred

1. Consideration of Potential for Damages Under Inverse Condemnation

In order to recover in an inverse condemnation suit, a farmer must first establish that there has been a taking substantial enough to destroy or lessen a property's value.¹⁸⁹ There must be a damage caused to a valuable property right.¹⁹⁰ California considers noise pollution to be a degradation of the environment and a health hazard.¹⁹¹ Since the state has recognized the negative and damaging effects of noise and has created laws to control it, the sound created by the high-speed rail should be considered to be damaging because of its potentially harmful results.¹⁹² The noise pollution caused by the rail is a taking because it will have a negative impact on farm animals and pollination crops located in the vicinity of the rail line.¹⁹³ Dairy cows milk production could potentially decrease,¹⁹⁴ costing dairy farmers a decrease in profits. Chicken farmers could also be detrimentally affected by the noise created by the rail if their chickens' blood composition changes and brooding is affected.¹⁹⁵ Sheep, swine, turkeys and honeybees also experience negative responses in reaction to audible stressors,¹⁹⁶ so farmers of these animals may also potentially experience detrimental monetary loss.¹⁹⁷ The damaging affect the high-speed rail could have on the farmers constitutes a compensable taking.¹⁹⁸

If a taking is established, farmers will be able to collect just compensation through inverse condemnation by proving this was an invasion on their property rights by a public entity, the Rail Authority, and that this invasion was the cause of their damages, herd and crop injuries. In order

¹⁸⁹ See *Oliver v. AT&T Wireless Services*, 90 Cal. Rptr. 2d 491, 497 (Cal. Ct. App. 1999).

¹⁹⁰ *City of Los Angeles v. Superior Court*, 124 Cal. Rptr. 3d 499, 506 (Cal. Ct. App. 2011).

¹⁹¹ CAL. HEALTH & SAFETY CODE § 118825.

¹⁹² See generally *Hanson*, *supra* note 61, at 29; *Effects of Aircraft Noise*, *supra* note 61, at 17.

¹⁹³ See generally *Hanson*, *supra* note 61, at 29; *Effects of Aircraft Noise*, *supra* note 61, at 17, 71.

¹⁹⁴ See *Impact Assessment*, *supra* note 9, at A-24.

¹⁹⁵ See *Effects of Aircraft Noise*, *supra* note 61, at 48.

¹⁹⁶ See *Effects of Aircraft Noise*, *supra* note 61, at 18, 71; *Hanson*, *supra* note 61, at 29.

¹⁹⁷ See *Hanson*, *supra* note 61, at 29; *Effects of Aircraft Noise*, *supra* note 61, at 17.

¹⁹⁸ See *Dina v. People ex. Rel Dept. of Transp.*, 60 Cal. Rptr. 3d 559, 576 (Cal. Ct. App. 2007).

to be justly compensable, the taking must be for a public use which affects a whole community, and the damage to the property must be a result of this public improvement.¹⁹⁹ Farmers must prove that detrimental injuries to their property and animals began to occur after construction and use of the rail commenced in order to recover in inverse condemnation.²⁰⁰ The landowners must show a marked difference in animal or crop production, quality, size or other measurable standard to demonstrate the harmful effect the rail intrusion may have had on their property.²⁰¹ If a farmer is able to prove the cause-and-effect relationship between the high-speed rail and decreased profits, the farmer would be entitled to just compensation.²⁰²

A private landowner is entitled to just compensation for damage caused to their property even if the land was not physically invaded for public improvement, and must only show a relationship between the damages and the public work.²⁰³ If a farmer's land or business is injured by the Rail Authority due to rail noise or vibrations, the farmer must only prove an injury to the property took place, even if no physical invasion occurred.²⁰⁴ The noise and vibrations caused by the high-speed rail may not constitute a physical invasion, but their effects could quite possibly have a debilitating effect on the crops and animals of farmers and in turn, cause them to suffer monetary loss.²⁰⁵ This negative effect on farmers and their businesses would constitute an infringement on a property right when the use of their property will become limited.²⁰⁶

In a typical inverse condemnation case, the property value on the date of the invasion is used to calculate damages.²⁰⁷ However, in this case, farmers should be entitled to compensation for the harmful effects on their animals and crops even though no physical invasion may have occurred by the Rail Authority because of the detrimental effect it will have

¹⁹⁹ *City of Los Angeles v. Superior Court*, 124 Cal. Rptr. 3d 499, 506 (Cal. Ct. App. 2011).

²⁰⁰ *See Pac. Gas and Electric Co. v. Hufford*, 319 P.2d 1033, 1038 (Cal. 1957).

²⁰¹ *See Oliver v. AT&T Wireless Services*, 90 Cal. Rptr. 2d 491, 497-498 (Cal. Ct. App. 1999).

²⁰² *See Skoumbas v. City of Orinda*, 81 Cal. Rptr. 3d 242, 250 (Cal. Ct. App. 2008).

²⁰³ *See id.*

²⁰⁴ *See City of Los Angeles*, 124 Cal. Rptr. 3d at 506.

²⁰⁵ *See Hanson*, *supra* note 61, at 29; *Effects of Aircraft Noise*, *supra* note 61, at 17, 71.

²⁰⁶ *See Oliver*, 90 Cal. Rptr. 2d at 498; *Dina v. People ex. Rel. Dept. of Transp.*, 60 Cal. Rptr. 3d 559, 576 (Cal. Ct. App. 2007).

²⁰⁷ *Los Osos Valley Assocs. v. City of San Luis Obispo*, 36 Cal. Rptr. 2d 758, 765 (Cal. Ct. App. 1994).

on their business.²⁰⁸ The amount of compensation that a landowner is entitled to is the equivalent of his or her losses suffered.²⁰⁹

Farmers should also be entitled to compensation for the decrease in property value they would suffer if their land evolved into a less habitable environment for their farming and business purposes.²¹⁰ If the potential uses for a property become diminished by the interference of noise and vibrations caused by the rail, the market value of the land could drop substantially.²¹¹ If this occurs, farmers will not only be injured by their loss in profits, but by a decrease in property values as well.²¹²

However, there is a strong argument that the noise pollution is not a taking unless damages can be proven to the farmer's animals or crops that were a direct result of the public improvement, public work, or public use.²¹³ A substantial cause-and-effect relationship between the noise or vibrations caused by the high-speed rail and the negative effects on the animals or crops must be established.²¹⁴ Farmers have the burden of proving this strong cause-and-effect relationship, which will be hard to substantiate because research on noise effects on animals is lacking and inconclusive.²¹⁵

The noise produced by the high-speed rail is shorter in duration than freeway noise, so if farmers are unable to be compensated for damage from vehicle traffic, they may not be entitled to compensation for another form of passenger travel which is publicly enabled.²¹⁶

Another roadblock to farmers being able to collect damages under inverse condemnation is that the injuries suffered will most likely not be unique if all farmers in the vicinity will experience similar negative effects from the high-speed rail.²¹⁷ In order to collect compensation, the damages must be specific to the individual and not a harm shared by a number of people,²¹⁸ and that is most likely not the case here.

²⁰⁸ See *Oliver*, 90 Cal. Rptr. 2d at 498; *Dina*, 60 Cal. Rptr. 3d at 576.

²⁰⁹ See *City of Los Angeles*, 124 Cal. Rptr. 3d at 506.

²¹⁰ See *Pac. Gas and Electric Co. v. Hufford*, 319 P.2d 1033, 1039 (Cal. 1957).

²¹¹ See *id.*

²¹² See *id.* at 1038.

²¹³ See *City of Berkeley v. von Adelung*, 29 Cal. Rptr. 802, 803 (Cal. Ct. App. 1963).

²¹⁴ See *Skoumbas v. City of Orinda*, 81 Cal. Rptr. 3d 242, 250 (Cal. Ct. App. 2008).

²¹⁵ See *Hanson*, *supra* note 61, at 27.

²¹⁶ See *Fact Sheet*, *supra* note 67, at 4 Figure 1.

²¹⁷ See *id.*

²¹⁸ See *Dina v. People ex. Rel Dept. of Transp.*, 60 Cal. Rptr. 3d 559, 576 (Cal. Ct. App. 2007).

2. *Just Compensation Will Not Be Awarded*

Farmers who do not suffer a tangible taking from the Rail Authority will be left with no compensation because the damages will be general to all landowners in the vicinity, and a cause-and-effect relationship between the damages and rail noise produced will be difficult to demonstrate.

VI. IS THIS THE RIGHT OUTCOME?

It is evident that farmers who have land physically taken by the Rail Authority and then suffer damages to their remaining property due to the noise and vibrations of the high-speed rail will be entitled to severance damages.²¹⁹ These farmers must only prove that their land is intrinsically less valuable because the activities available to be carried out on the property have become limited.²²⁰ Farmers who suffer an intangible intrusion by the noise and vibrations created by the rail but do not suffer a physical taking will probably be left with no recourse to recover just compensation for their loss.²²¹ Farmers will most assuredly be able to collect just compensation for severance damages when there has been a physical taking of their land through eminent domain if they can prove depreciation of their land value.²²² Farmers who do not suffer such a taking, however, will most likely be left without compensation for the damages caused to their property.²²³

Though the damages the land owners suffered may not be ruled to be compensable, it is not fair that they experience monetary damages and receive no reimbursement simply because they have suffered no actual invasion.²²⁴ The California Legislature did not intend, when creating the eminent domain law, to compensate severance damages rather than inverse condemnations.²²⁵ The negative effect of the annoyance on crops or animals that leads to reduced profits or income constitutes a damaging effect on a valuable property right, and there is no difference between this effect on a landowner who had to give up some land to the Rail Au-

²¹⁹ See *Pac. Gas and Electric Co. v. Hufford*, 319 P.2d 1033, 1038 (Cal. 1957).

²²⁰ See *id.* at 1038-1039.

²²¹ See *City of Berkeley v. von Adelung*, 29 Cal. Rptr. 802, 803 (Cal. Ct. App. 1963); Hanson, *supra* note 61, at 27.

²²² See *Hufford*, 319 P.2d at 1038.

²²³ See *von Adelung*, 29 Cal. Rptr. at 803; Hanson, *supra* note 61, at 27.

²²⁴ See *Oliver v. AT&T Wireless Services*, 90 Cal. Rptr. 2d 491, 497-498 (Cal. Ct. App. 1999); Cox, *supra* note 142, at 25.

²²⁵ Cox, *supra* note 142, at 21.

thority and a landowner who did not suffer such a taking.²²⁶ Both are equally affected by the noise and vibrations, so both types of property owners should be equally compensated.²²⁷ It is unjust that California law currently compensates one type of landowner with severance damages for the exact same harms suffered by a property owner in an inverse condemnation suit.²²⁸ Since landowners who suffer a tangible taking are allowed severance damages for the injury they suffer to the remainder of their property,²²⁹ landowners who do not suffer a tangible taking but are harmed by the same noises and vibrations created by the public benefit should also be compensated.²³⁰

VII. CONCLUSION

A high-speed rail system could soon become a reality in California. A large amount of agricultural land between Sacramento and Bakersfield will be affected by both the construction and use of the rail.²³¹ Farm-raised animals and pollination crops will most certainly be damaged by the noise and vibrations created by the system.²³² Landowners also face the possibility that their property values will decrease due to a lowered capacity of uses of their land.²³³ Farmers should be entitled to just compensation established in the California Constitution for the damage to their land and animals because such impairment amounts to a taking. In order to recover for such losses, landowners who do not suffer a physical taking by the Rail Authority will need to bring an action in inverse condemnation, establish a taking or damaging occurred, and prove the damages suffered. This attempt at recovery will most likely be futile and result in a decision against them. On the other hand, property owners who do suffer an actual taking from the Rail Authority will most certainly be awarded severance damages for the harms that result to their remaining property, including loss of property value due to a decrease in viable activities able to be performed on the land resulting from the noise and vibrations caused by the high-speed rail. This disparity in com-

²²⁶ See Hanson, *supra* note 61, at 29; *Effects of Aircraft Noise*, *supra* note 61, at 17.

²²⁷ See Cox, *supra* note 142, at 21; Hanson, *supra* note 61, at 29; *Effects of Aircraft Noise*, *supra* note 61, at 17, 71.

²²⁸ Cox, *supra* note 142, at 16-17, 23.

²²⁹ See *Pac. Gas and Electric Co. v. Hufford*, 319 P.2d 1033, 1038 (Cal. 1957).

²³⁰ See *People ex rel. Dept. Pub. Works v. Volunteers of America*, 98 Cal. Rptr. 423, 435 (Cal. Ct. App. 1971).

²³¹ See Sheehan, *supra* note 1.

²³² See *Effects of Aircraft Noise*, *supra* note 61, at 17, 71; Hanson, *supra* note 61, at 29.

²³³ See *Pac. Gas and Electric Co. v. Hufford*, 319 P.2d 1033, 1041-1042 (Cal. 1957).

pensable damages does not seem fair, but under current California law, it seems to be the most likely outcome.

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