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**HIGH-SPEED RAIL IN AMERICA: AN EVALUATION OF THE
REGULATORY, REAL PROPERTY, AND ENVIRONMENTAL
OBSTACLES A PROJECT WILL ENCOUNTER**

Darren A. Prum^{} & Sarah L. Catz^{**}*

In 2009, President Barack Obama allocated \$8 billion in stimulus funding for high-speed rail projects across the United States. One year later, in 2010, an additional \$2.5 billion was distributed to corridors with High-Speed Rail Projects. Even though the most recent congressional budget eliminated high-speed rail funding, many corridors are working diligently to break ground by the end of 2012. Before a high-speed rail project can be fully implemented there are many legal and environmental issues and regulations to examine. This paper conducts a complete analysis of those issues and regulations and suggests how to apply them to a successful high-speed rail project.

I. INTRODUCTION

What we need, then, is a smart transportation system equal to the needs of the 21st century. A system that reduces travel times and increases mobility. A system that reduces congestion and boosts productivity. A system that reduces destructive emissions and creates jobs. What we're talking about is a vision for high-speed rail in America.¹

With the foregoing and other accompanying statements on April 16, 2009, President Barack Obama explained his desire to bring the nation a new transportation infrastructure that uses a high-speed rail ("HSR") system to connect the population centers

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¹ President Barack Obama, Remarks by the President and Vice President on A Vision for High Speed Rail in America (Apr. 16, 2009), *available at* http://www.whitehouse.gov/the_press_office/Remarks-by-the-President-and-the-Vice-President-on-High-Speed-Rail/.

across the country.² Though the Obama Administration made the most recent push, the genesis of the modern approach actually began to occur when Congress authorized appropriations for five HSR corridors in 1991³ followed by appropriations for another six in 1998.⁴

The 111th Congress decided to further fund these initiatives with the Passenger Rail Investment and Improvement Act of 2008 ("PRIIA"),⁵ followed by the American Recovery and Reinvestment Act of 2009 ("Stimulus Bill").⁶ PRIIA directed the Department of Transportation ("DOT") to develop and award three new competitive grants for HSR and intercity passenger rail capital improvements,⁷ while the Stimulus Bill provided the funding for these programs with \$8 billion.⁸ Following these actions, Congress provided an additional \$2.5 billion in funding when it passed the DOT Appropriations Act in December 2009.⁹

Most recently, the Obama Administration announced its intentions to spend an additional \$53 billion over the following six years to advance the national construction of a HSR network

² See Michael D. Shear, *Obama Pushes Vision for High-Speed Rail*, THE WASHINGTON POST (Apr. 16, 2009, 10:31 AM), http://voices.washingtonpost.com/44/2009/04/16/by_michael_d_shear_declaring.html.

³ See Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), Pub. L. No. 102-240, § 1003, 105 Stat. 1914, 1918–20.

⁴ Transportation Equity Act for the 21st Century (TEA-21), Pub. L. No. 105-178, § 1101, 112 Stat. 107, 111–14 (1998). According to one report, Congress began investigating high-speed ground transportation as an alternative mode in 1965 when it authorized and funded the Office of High Speed Ground Transportation within the Federal Railroad Administration to develop and demonstrate these cutting edge technologies across the nation. See FED. R.R. ADMIN., HIGH-SPEED GROUND TRANSPORTATION FOR AMERICA 1-1 (1997), available at <http://www.fra.dot.gov/Downloads/RRDev/cfs0997all2.pdf>.

⁵ Passenger Rail Investment and Improvement Act of 2008 (PRIIA), Pub. L. No. 110-432, 122 Stat. 4848.

⁶ American Recovery and Reinvestment Act of 2009 (Stimulus Bill), Pub. L. No. 111-5, 123 Stat. 115.

⁷ PRIIA § 501.

⁸ Stimulus Bill, Pub. L. No. 111-5, 123 Stat. 115.

⁹ Omnibus Appropriations Act of 2009, Pub. L. No. 111-8, 123 Stat. 524.

across the country.¹⁰ However, governors in states like Florida, Ohio, and Wisconsin recently returned the federal money citing the lack of need for the HSR project in their jurisdictions or citing other concerns that at some point local funding will need to subsidize the construction overruns or the cost of operations.¹¹ In response, the Obama Administration simply reallocated the rejected funding distributions to other jurisdictions while proceeding with the national HSR network plan.¹²

With the government allocating so many resources monetarily and labor-wise to creating an HSR infrastructure across the nation, achieving this goal will undoubtedly bring numerous other obstacles. While HSR seems to present a situation that would cause the legal community to face new challenges, in many respects it brings forward decisions settled long ago when our nation first began using railways for transportation purposes.¹³ It also reignites jurisdictional issues between federal and state governance on a variety of subjects like real property and environmental law.¹⁴

Since many of the critics of HSR focus exclusively on the costs associated with implementing and operating a system, this examination looks to put those controversial issues aside and delve into the other obstacles such a project must resolve in order to succeed. As the main originator for public policy, the federal government plays a vital role in the success or failure of an HSR project through its regulatory and funding mechanisms. Moreover, real property doctrines and land use guidelines will influence where and how HSR will occur, since this type of project is land

¹⁰ Press Release, Office of the Vice President, Vice President Biden Announces Six Year Plan to Build National High-Speed Rail Network (Feb. 8, 2011), available at <http://www.whitehouse.gov/the-press-office/2011/02/08/vice-president-biden-announces-six-year-plan-build-national-high-speed-r>.

¹¹ See Joan Lowy & Kevin Freking, *Wisconsin High-Speed Rail Money Goes Elsewhere: Republican Governor Rejects Federal Funds*, THE HUFFINGTON POST (Dec. 9, 2010, 4:22 PM), http://www.huffingtonpost.com/2010/12/09/wisconsin-highspeed-rail-_n_794721.html.

¹² *Id.*

¹³ See *infra* Part IV.

¹⁴ See *infra* Parts IV, V.

intensive.¹⁵ Likewise, the environmental impacts of an HSR project must receive consideration due to the scale and influential effect such an undertaking places on its surroundings.

To this end, Part II focuses on how the federal government defines HSR. Part III looks into the different agencies and departments involved at the federal government level and examines their role in the creation and operation of an HSR network in the country. Part IV investigates the unique real property issues facing an HSR project like right of way and land use regulations, while Part V tackles the environmental aspects and requirements. Finally, Part VI concludes by analyzing the public policy issues surrounding HSR and the components needed to move forward with such an endeavor.

II. HIGH-SPEED RAIL DEFINITIONS

When considering the different technologies, one of the first steps should include a determination as to what qualifies as HSR. Currently, the two types of modern high-speed trains employ either a magnetic levitation (“maglev”) or a steel-on-wheel technology to achieve high velocities.¹⁶

A. Maglev v. Steel-on-Wheel Technology

The steel-on-wheel system utilizes steel wheels and track with electric motors for propulsion.¹⁷ It requires a dedicated track with straight or minimal curve distances to achieve the maximum speeds; however, it can also operate at much slower speeds when using conventional rail systems.¹⁸

¹⁵ See *infra* Part IV.

¹⁶ Austl. Acad. of Sci., *Looking Down the Track at Very Fast Trains*, NOVA: SC. NEWS, <http://www.science.org.au/nova/025/025print.htm> (last updated Jan. 2002).

¹⁷ *Id.*

¹⁸ *Id.* Proponents of this technology point out the impressive operational and safety record of these trains over many years as well as the ability to grow the reach of these trains on an as-needed basis. See *id.* Because the trains can operate on both existing and dedicated tracks, an operator can expand in a piecemeal fashion over time, which allows for immediate implementation without the need for complete financing. See *id.* Accordingly, many countries

In contrast, the much newer technology of maglev produces a train that seems to float on a cushion of air rather than steel wheels and a track.¹⁹ This system uses electromagnets and a guideway to levitate and propel the train.²⁰ As a result, the train no longer needs an onboard motor because the propulsion comes from the distinctive guideway needing its own dedicated track to operate.²¹

To make the definition clearer, Congress explained that HSR in the United States includes:

[A]ll forms of nonhighway ground transportation that run on rails or electromagnetic guideways providing transportation service which is—

(A) reasonably expected to reach sustained speeds of more than 125 miles per hour; and

(B) made available to members of the general public as passengers, but does not include rapid transit operations within an urban area that are not connected to the general rail system of transportation²²

Based on this broad definition, Congress provided a flexible framework to allow all those involved in bringing HSR across the country the ability to select the technology that best serves their needs.

B. DOT Definitions

However, HSR also operates within a more expansive context since it can sometimes describe a larger transportation system. With a few exceptions like the rail route from Washington, D.C., to Boston, Massachusetts, Congress additionally allowed the

around the world already use them everyday on both existing and dedicated tracks. *Id.*

¹⁹ *See id.*

²⁰ *Id.*

²¹ *Id.* Proponents of this technology explain that the lack of wheels on a track provides many benefits. *Id.* They claim the lack of friction due to the wheelless system creates situations where the train needs less energy than a conventional one. *Id.* It also generates less noise, so it provides more environmental benefits as well. *Id.* Furthermore, adjustments to the propulsion system on steeper grades allow a maglev train to overcome more difficult terrain, which lessens the need for expensive tunnels. *Id.* However, this emerging technology requires its own system of guideways that disallow the use of the existing track infrastructure and cannot boast a long record of service around the globe. *Id.*

²² 49 U.S.C. § 26105(2) (2006).

Secretary of Transportation to define the term “national rail passenger transportation system.”²³ Secretary Ray LaHood put forward his detailed definitions in the Federal Railroad Administration’s (“FRA”) strategic plan called *A Vision for High-Speed Rail in America*.²⁴ In this publication, the FRA created four distinct corridors and defined them as follows:

HSR—Express. Frequent, express service between major population centers 200–600 miles apart, with few intermediate stops. Top speeds of at least 150 mph on completely grade-separated, dedicated rights-of-way (with the possible exception of some shared track in terminal areas). Intended to relieve air and highway capacity constraints.

HSR—Regional. Relatively frequent service between major and moderate population centers 100–500 miles apart, with some intermediate stops. Top speeds of 110–150 mph, grade-separated, with some dedicated and some shared track (using positive train control technology). Intended to relieve highway and, to some extent, air capacity constraints.

Emerging HSR. Developing corridors of 100–500 miles, with strong potential for future HSR Regional and/or Express service. Top speeds of up to 90–110 mph on primarily shared track (eventually using positive train control technology), with advanced grade crossing protection or separation. Intended to develop the passenger rail market, and provide some relief to other modes.

Conventional Rail. Traditional intercity passenger rail services of more than 100 miles with as little as one to as many as 7–12 daily frequencies; may or may not have strong potential for future high-speed rail service. Top speeds of up to 79 mph to as high as 90 mph generally on shared track. Intended to provide travel options and to develop the passenger rail market for further development in the future.²⁵

As such, the features of the track, the speeds of the trains, and the distance between destinations play more of a role in distinguishing HSR from conventional rail rather than technology like steel wheels versus magnetic levitation.

When looking more closely at the definitions put forward by the DOT, each category except “HSR—Express” calls for the use

²³ 49 U.S.C. § 24102(5)(B).

²⁴ See FED. R.R. ADMIN., *A VISION FOR HIGH-SPEED RAIL IN AMERICA* (2009).

²⁵ *Id.* at 2.

of shared track.²⁶ By placing this requirement into the definition, only the steel wheel technology may qualify, since a maglev can only operate on its own unique track. In the case of “HSR—Express,” the definition calls for dedicated and exclusive railways but also creates a caveat for shared track in the terminals and thus allows both technologies.²⁷

Accordingly, the DOT created three categories that preclude the maglev technologies and promote only the tilt system.²⁸ However, the last description favored the maglev approach over the other system; yet, it also created an allowance for using shared track in the terminals, which provides the operators the ability to still utilize the steel wheel technology.²⁹

Thus, both technologies qualify as HSR under the Congressional definition; to gain recognition in almost every category by the DOT as a “national rail passenger system,” however, only the steel wheel system can universally satisfy the requirement of being able to operate on both dedicated and shared track right of ways.³⁰

III. FEDERAL GOVERNMENT

In setting a policy objective and direction for the country, President Obama, in conjunction with the 111th Congress’ support, directed the DOT to proceed toward his vision.³¹ While this part of the government bears the burden of planning and executing the HSR vision, the Environmental Protection Agency (“EPA”) also plays a role in making sure the introduction of this new technology falls within permissible standards and guidelines as put forward by Congress, adopted regulations, and the courts.

²⁶ *Id.*

²⁷ *See id.*

²⁸ *See id.*

²⁹ *See id.*

³⁰ *See id.*

³¹ FED. R.R. ADMIN., PRELIMINARY NATIONAL RAIL PLAN (2009), *available at* <http://www.fra.dot.gov/downloads/railplanprelim10-15.pdf>.

A. *Department of Transportation*

On a federal level, the main DOT agencies involved with HSR from a transportation perspective include the FRA and Surface Transportation Board (“STB”). Each maintains its own expertise and purpose that will assist in bringing the country closer to an HSR infrastructure system across the country.

1. *Federal Railroad Administration (“FRA”)*

As the principal federal agency putting together the nation’s rail service strategy, the FRA fulfills its mission by developing freight and passenger rail policy, safety regulations and initiatives, legislation, and conducting research and development activities, as well as enforcing the safety regulations.³² In these capacities, the FRA oversees many of the traditional areas considered part of mass transit like passenger rail service, but it also includes many of the most relied upon systems in the urban setting, such as light rail and subways.³³ Moreover, it is at the center of bringing the latest technology in this field to our country through high-speed passenger rail service.³⁴

a. *The Foundation of HSR*

Beginning with the Intermodal Surface Transportation Efficiency Act of 1991 (“ISTEA”), the FRA received direction to select up to five corridors for the HSR designation and continued funding allocations for this new direction.³⁵ Based on this instruction, the FRA chose locations in the Midwest, Florida, California, the Southeast, and the Pacific Northwest for the special

³² See U.S. Dep’t of Transp., *Administrator/Deputy Administrator*, FED. R.R. ADMIN., <http://www.fra.dot.gov/Pages/1280.shtml> (last visited Jan. 11, 2011). The FRA was created by the Department of Transportation Act of 1966. Department of Transportation Act of 1966, Pub. L. No. 89-670, 80 Stat. 931, 931–50 (1966) (current version at 49 U.S.C. § 103 (2006)).

³³ See U.S. Dep’t of Transp., *About the FRA*, FED. R.R. ADMIN., <http://www.fra.dot.gov/us/content/2> (last visited Dec. 23, 2009).

³⁴ See U.S. Dep’t of Transp., *Research and Development Programs*, FED. R.R. ADMIN., <http://www.fra.dot.gov/us/content/226> (last visited Dec. 26, 2009).

³⁵ Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), Pub. L. No. 102-240, § 1010, 105 Stat. 1914, 1934–35.

designation.³⁶ The legislation allocated \$800 million for a National High-Speed Ground Transportation Program and \$30 million to remove highway/rail grade crossings in the designated corridors.³⁷ It also changed the definitions in the Railroad Revitalization and Regulatory Reform Act of 1976 so that the government now had the ability to guarantee loans needed to finance and construct HSR up to \$1 billion.³⁸ However, due to the absence of a request for the money by the Executive Branch of the government, Congress rescinded funding for the development of the maglev prototype, and the loan program did not receive its appropriations.³⁹

Subsequently, Congress passed the Transportation Equity Act for the 21st Century ("TEA-21") in 1998, which authorized an additional six corridors.⁴⁰ This time the FRA established corridors in the Gulf Coast, Northern New England, a Keystone route that crosses Pennsylvania, an Empire State passage within the State of New York, and a South Central one from Oklahoma and Arkansas

³⁶ See U.S. Dep't of Transp., *Chronology of High-Speed Rail Corridors*, FED. R.R. ADMIN., <http://www.fra.dot.gov/rpd/passenger/618.shtml> (last visited Feb. 4, 2011). The original design of the Midwest corridor linked Chicago, Illinois with Detroit, Michigan, St. Louis, Missouri, and Milwaukee, Wisconsin. *Id.* The Florida corridor connected Miami with Orlando and Tampa, and the California location joined San Diego and Los Angeles with the Bay Area and Sacramento via the San Joaquin Valley. *Id.* The Southeast route looked to link Charlotte, North Carolina, Richmond, Virginia, and Washington, D.C. *Id.* Finally, the Pacific Northwest corridor connected Eugene and Portland, Oregon, with Seattle, Washington, and Vancouver, British Columbia, Canada. *Id.*

³⁷ Intermodal Surface Transportation Efficiency Act §§ 1010, 1036. In creating the \$800 million program, Congress allocated \$725 million for a U.S. designed Maglev prototype, \$50 million for the demonstration of the program's new technologies, and \$25 million for research and development. *Id.* § 1036. Projects in California, Florida, Illinois, Indiana, Michigan, North Carolina, Oregon, Virginia, Washington, and Wisconsin did receive and spend the \$30 million set aside for removing highway/rail grade crossings in preparation for HSR. See FED. R.R. ADMIN., *supra* note 4, at 1-4.

³⁸ Intermodal Surface Transportation Efficiency Act § 1034.

³⁹ FED. R.R. ADMIN., *supra* note 4, at 1-4.

⁴⁰ Transportation Equity Act for the 21st Century (TEA-21), Pub. L. No. 105-178, § 1103(c), 112 Stat. 107, 122-23 (1998) (codified as amended at 23 U.S.C. 104 (2006)).

to Texas.⁴¹ In addition to designating these corridors, the FRA also expanded and created new routes within those already recognized by the government.⁴²

Thus, Congress charged the FRA with the responsibility to manage and distribute new monies for improving the nation's rail system while shaping a comprehensive strategy and plan to move the country forward with the arduous task of implementing this tremendous objective.

b. *HSR Objectives and Strategy*

Following the directives of PRIIA and the Rail Safety Improvement Act of 2008, the Administrator of the FRA published the *Preliminary National Rail Plan* in October 2009, and the Stimulus Bill required the DOT to issue *A Vision for High-Speed Rail in America* in April 2009.⁴³ In the *Preliminary National Rail Plan*, the FRA sets a broad-based objective by calling for HSR to build upon the already successful highway and aviation models of the past; in order to accomplish this modern goal, however, the federal and state governments need to make a long-term commitment to the strategy as well.⁴⁴

Past decades garnered incremental steps that laid the foundation for HSR, and the Stimulus funding conveys a more

⁴¹ See U.S. Dep't of Transp., *supra* note 36. The Gulf Coast corridor connects New Orleans, Louisiana, with Houston, Texas, as well as Birmingham and Mobile, Alabama. *Id.* The corridor for Northern New England created a hub in Boston, Massachusetts, with links to Portland, Maine, and Montreal, Quebec, Canada, using routes through New Hampshire and Vermont. *Id.*

⁴² *Id.* The Midwest corridor was later changed to the Chicago Hub and expanded to also consist of links all the way to Minneapolis, Minnesota, from Milwaukee, Wisconsin; to Louisville, Kentucky, and Cincinnati, Ohio, via Indianapolis, Indiana; to Toledo and Cleveland, Ohio; and to Kansas City, Missouri. *Id.* The Southeast corridor created a loop from Raleigh, North Carolina, to the Gulf Coast route and back with a connection in Atlanta, Georgia, and stops in Greenville, South Carolina; Macon, Georgia; Jacksonville, Florida; Savannah, Georgia; and Columbia, South Carolina. *Id.* Lastly, the Northern New England and Empire corridors expanded to connect in Springfield, Massachusetts, with an additional link to New Haven, Connecticut; the California route added a Las Vegas, Nevada, component. *Id.*

⁴³ See FED. R.R. ADMIN, *supra* note 31; FED. R.R. ADMIN, *supra* note 24.

⁴⁴ See FED. R.R. ADMIN *supra* note 31, at 1–10.

significant financial commitment by the federal government towards completing a network across the country.⁴⁵ By making and funding this continual strategic investment, the FRA believes that the public will discover new resources in infrastructure, equipment, performance, and intermodal connections as well as a backlog of projects to further the development of additional corridors.⁴⁶

However, the FRA noted that this type of endeavor would require federal and state governments to expand their program management capabilities to handle such projects.⁴⁷ Since the introduction of HSR will bring a new and complementary approach to the nation's transportation system, government and industry will need to jointly develop and further enhance the country's expertise in passenger rail systems, as well as in the manufacturing of such technology.⁴⁸ The FRA explains that these types of challenges provide the country with unique opportunities to grow as a nation since this endeavor requires many new capabilities.⁴⁹

Refining the *Preliminary National Rail Plan's* broad objectives, *A Vision for High-Speed Rail in America* further examines the same issues in more detail but also puts forward a strategy for the country to accomplish the stated objective of a national HSR network.⁵⁰ In shaping the national policies covering HSR, the FRA looks to direct the country with a three-part approach that includes a funding component, a project selection aspect, and an implementation schedule.⁵¹

In constructing the FRA's funding approach, the agency incorporated the DOT's mandates and restrictions from the Stimulus while attempting to move the existing long-term policies forward.⁵² It proposes a tripartite use of the Stimulus funding to

⁴⁵ *Id.* at 5–6.

⁴⁶ *Id.* at 7–8.

⁴⁷ *Id.* at 8.

⁴⁸ *Id.* at 11.

⁴⁹ *Id.*

⁵⁰ See generally FED. R.R. ADMIN, *supra* note 24.

⁵¹ See *id.* at 12–18.

⁵² *Id.* at 12–13.

benefit those HSR projects immediately available, those in the midst of planning, and those that will develop in the future.⁵³

For existing projects that qualify under Sections 301 and 302 of the Stimulus, the FRA looks to use grants to fund the completion of these endeavors.⁵⁴ These grants would encompass a standard agreement that includes specific terms and conditions as well as FRA supervision with reporting guidelines based on provisions from the Stimulus.⁵⁵

In situations like the corridor programs, Section 501 or 301 of the Stimulus will set the qualifications for an HSR segment to receive funds.⁵⁶ However, in instances where a corridor program fails to qualify, the FRA will maintain funding to complete the Stimulus preconditions, creating eligibility for awards upon future solicitation.⁵⁷ In these cases, the FRA looks to initially set aside funding for those corridor applications selected, and when a project achieves the stated objectives, the agency will release the money.⁵⁸

For those activities in the planning stage, the FRA looks outside of the Stimulus monies to fund preliminary actions under Section 301 of the PRIIA, with the intention to create a pipeline of future projects as part of the larger national HSR network.⁵⁹ By

⁵³ See *id.* at 16–17.

⁵⁴ *Id.* at 12–13. Section 301 covers intercity passenger rail construction and rehabilitation projects, while section 302 comprises congestion undertakings. *Id.* They may include infrastructure, facilities and equipment in order to qualify. *Id.* Furthermore, the Stimulus requires the status of projects to be ready for implementation, which includes environmental compliance and the completion of initial engineering, as well as having demonstrated the “independent utility” which shows the immediate benefits and the delivery of benefits absent other improvements. *Id.*

⁵⁵ *Id.* at 13–14.

⁵⁶ *Id.* To qualify under these sections, “corridor programs must: (a) be based on a corridor plan that establishes service objectives and includes a prioritized list of projects to achieve those objectives; and (b) have completed sufficient corridor/section/phase programmatic or project environmental (NEPA) documentation and sufficient planning to provide reasonable project cost and benefit estimates.” *Id.* at 13.

⁵⁷ *Id.* at 12–13.

⁵⁸ *Id.* at 13. The FRA explains that this method provides an elevated level of assistance and Federal supervision than currently required in the standard grant agreements issued under the Stimulus. *Id.*

⁵⁹ *Id.*

doing this, the FRA looks to assist the States by preparing them to pursue the remaining funds available in successive Stimulus awards as well as by ensuing appropriations by Congress.⁶⁰

Turning to the project selection level, the FRA sets forth prerequisites that will enable further consideration based on specific criteria.⁶¹ Each state must explain the HSR project's planning and development details; give details on any stakeholder agreements; provide a financial strategy for operation, maintenance, and construction; and satisfactorily demonstrate to the government that the accountable entity can properly and effectively manage the program and projects.⁶² With these requirements satisfied, the FRA will then evaluate the project based on its ability to supply quantifiable and realistic benefits in a timely and cost-effective manner contingent upon consideration of the totality of the investment with public monies, the capacity to address mitigating risk factors included as part of the prerequisites, and other important yet intangible aspects like timeliness of delivery and the adequacy of the managerial oversight.⁶³ As such, the FRA selection process tries to award and advance those projects that can "deliver programmatic results, achieve economic stimulus, achieve long-term public benefits, and satisfy transparency and accountability objectives."⁶⁴

Finally, the FRA envisions two rounds to award and release the Stimulus funds under the implementation schedule with each cycle containing several solicitations.⁶⁵ The first round looks to commit Stimulus and Fiscal Year 2009 appropriations by creating three solicitations based on the three different funding components.⁶⁶ The FRA schedules subsequent rounds for resubmissions, revisions of unsuccessful applications, and new applications using the same solicitation formula as used in the first cycle.⁶⁷ Through this

⁶⁰ *Id.*

⁶¹ *Id.* at 14–16.

⁶² *Id.* at 14–15.

⁶³ *Id.* at 15.

⁶⁴ *Id.*

⁶⁵ *Id.* at 16–17. Should funding remain after the initial two rounds, the FRA plans to add additional ones until all of the resources are obligated. *Id.*

⁶⁶ *Id.* at 16.

⁶⁷ *Id.* at 17.

implementation approach, the FRA believes it can provide an approach that takes into consideration the limitations confronting potential applicants, along with the directives contained in the Stimulus and the goals put forth by the Obama Administration and Congress to develop a national HSR network.⁶⁸

c. *The Maglev Deployment Program*

In addition to its other HSR activities, the FRA also supervises the nation's Maglev Deployment Program that offers the possibility of \$950 million in federal funding for a selected location in the country.⁶⁹ This program comes from the TEA-21 legislation where Congress decided to select a forty-mile HSR route to demonstrate the Maglev technology available for adoption in the future as an alternative and efficient mode for passenger transportation in the intercity corridors located across the country.⁷⁰

To complement efforts to establish a ubiquitous application of HSR technology, Congress created a competitive process amongst the various regional locations to apply for the initial \$55 million in funding available for the preconstruction planning portion of the project.⁷¹ In response, the FRA awarded grants to seven locations in May 1999 to take part in a twelve month pilot study that funded the preconstruction planning phase in order to ascertain the project with the most potential.⁷²

On June 30, 2000, each participant put forward a project description for evaluation by a selection review committee from

⁶⁸ *Id.* at 17–18.

⁶⁹ Transportation Equity Act for the 21st Century (TEA-21), Pub. L. No. 105-178, § 1218, 112 Stat. 107, 216–19 (1998).

⁷⁰ See U.S. Dep't of Transp., *History of the MAGLEV Deployment Program*, FED. R.R. ADMIN., <http://www.fra.dot.gov/rpd/freight/209.shtml> (last visited Feb. 24, 2011).

⁷¹ Transportation Equity Act for the 21st Century § 1218. More specifically, in order to qualify, a state, local or private entity must also match the federal funds by one-third to two-thirds for planning and construction, establish that operating revenues would surpass costs, and demonstrate that the advantages outdo the total costs when evaluated on a forty year timeframe. *Id.*

⁷² See U.S. Dep't of Transp., *supra* note 70. The FRA awarded the planning grants to Los Angeles, CA; Cape Canaveral, FL; Atlanta, GA, to Chattanooga, TN; New Orleans, LA; Baltimore, MD, to Washington, D.C.; Las Vegas, NV, to Anaheim, CA; and Pittsburgh, PA. *Id.*

the DOT to assist the Secretary of Transportation in choosing the location to receive subsequent funding for the preconstruction planning.⁷³ In the end, the DOT opted to proceed with the Maryland and Pennsylvania proposals and released an additional \$14 million to these projects to refine their ridership forecasts and cost assessments, improve their sponsorship assurances, and start the environmental evaluation on the routes.⁷⁴

With the passage of new legislation in 2008, Congress decided to change the ground rules for the maglev program by altering the qualifications for receiving the federal funds and by adding a twenty percent non-Federal match requirement.⁷⁵ The law provided \$90 million for maglev projects during the fiscal years of 2008 and 2009, but Congress conditioned funding to be evenly distributed between two projects: a line connecting Las Vegas to Primm, Nevada, and a line between two points “east of the Mississippi River.”⁷⁶ This essentially forced the Maryland and Pennsylvania proposals to compete against the other for half of the funds.

As a result, the Maryland proposal published its Draft Environmental Impact Statement in October 2003, held seven public comment meetings, and completed its review in January 2004.⁷⁷ However, the State of Maryland effectively terminated the project by prohibiting any further governmental expenditures from any source within its jurisdiction for the purpose of studying, developing, or constructing a maglev system during its 2004

⁷³ *Id.* The Project Description needed to include estimated environmental evaluations, a financial model for both anticipated expenditures for construction, equipment, and operations and maintenance as well as forecasts for ridership with the associated abilities to generate revenue, a schedule of completion, and plans for operating the system in conjunction with management structure. *Id.*

⁷⁴ Press Release, U.S. Dep’t of Transp., U.S. Sec’y of Transp. Slater Selects Two High Speed Maglev Projects (Jan. 18, 2001), *available at* <http://www.fra.dot.gov/Pages/press-releasesold/262.shtml>.

⁷⁵ SAFETEA-LU Technical Corrections Act of 2008, Pub. L. No. 110-244, 122 Stat. 1572 (2008).

⁷⁶ *Id.* § 102(a) & (d).

⁷⁷ See U.S. Dep’t of Transp., *Baltimore-Washington Maglev*, FED. R.R. ADMIN., <http://www.fra.dot.gov/rpd/freight/1193.shtml> (last visited Feb. 24, 2011).

legislative session.⁷⁸ Left as the sole survivor from the points “east of the Mississippi River,” Pennsylvania published its Draft Environmental Impact Statement in July 2001 and completed the necessary requirement to receive FRA approval for the Final Environmental Impact Statement on May 7, 2010.⁷⁹

Moreover, the FRA published its Notice of Intent to prepare a Programmatic Environmental Impact Statement on May 20, 2004 for the Nevada route,⁸⁰ but the \$45 million allocated by Congress has yet to make it to the maglev route due to the attempts of Senator Harry Reid to divert the money to a highway project in Las Vegas.⁸¹ As a result, the FRA reports this project as delayed due to funding constraints.⁸²

Hence, the Maryland Legislature effectively killed the proposal within its state, and the Nevada route eventually saw its money redirected in a political maneuver; the Pennsylvania project appears to be in a position to succeed since it is the only one still receiving federal funds and progressing.⁸³

Accordingly, the FRA plays a significant role in many different aspects related to HSR policies in its capacity to provide regulations, to set forth a research and development program, and

⁷⁸ S. 508, 422th Gen. Assemb., Reg. Sess. (Md. 2004).

⁷⁹ See U.S. Dep’t of Transp., *Pennsylvania Maglev*, FED. R.R. ADMIN., <http://www.fra.dot.gov/rpd/freight/1196.shtml> (last visited Feb. 24, 2011).

⁸⁰ Programmatic Environmental Impact Statement: High Speed Rail Corridor Las Vegas, NV to Anaheim, CA, 69 Fed. Reg. 29,161 (2004).

⁸¹ Kyle Hansen, *\$45 million for maglev shifted to airport road project*, LAS VEGAS SUN (Mar. 17, 2010, 5:31 PM), <http://www.lasvegassun.com/news/2010/mar/17/45-million-maglev-shifted-airport-road-project/>. Many believe Senator Reid took this action after an investor in a competing HSR route with strong political connections in the state of Nevada formed a campaign support group to assist him in a tight upcoming reelection bid. See Richard N. Velotta, *DesertXpress rail project going after tax dollars, after all*, LAS VEGAS SUN (Feb. 21, 2011, 2:00 AM), <http://www.lasvegassun.com/news/2011/feb/21/desert-xpress-going-after-tax-dollars-after-all/>.

⁸² See U.S. Dep’t of Transp., *Current Project Status*, FED. R.R. ADMIN., <http://www.fra.dot.gov/rpd/freight/211.shtml> (last visited Feb. 25, 2011).

⁸³ See U.S. Dep’t of Transp., *Funding for Maglev*, FED. R.R. ADMIN., <http://www.fra.dot.gov/rpd/downloads/FundingForMAGLEV.pdf> (last visited Feb. 24, 2011).

to develop the country's strategic plan for implementing a national network.

2. *Surface Transportation Board ("STB")*

With the closure of the Interstate Commerce Commission, Congress created the STB in 1995 to resolve railroad rate and service disputes as well as to provide regulatory review for proposed railroad mergers.⁸⁴ The STB adjudicates and regulates mergers and the sales of routes, in addition to tracking construction and abandonment in its capacity to oversee rail-restructuring transactions.⁸⁵ Based upon this exclusive authority from Congress, the legislative history further shows the intention that the board take actions that retain only those regulations necessary for "address[ing] problems of rates, access to facilities, and industry restructuring" while "keeping bureaucracy and regulatory costs at the lowest possible level, consistent with affording remedies only where they are necessary and appropriate."⁸⁶

In order to accomplish these goals, the STB requires all railroad projects looking to extend or construct and operate a new line to apply for authority to proceed.⁸⁷ As part of this application,

⁸⁴ ICC Termination Act of 1995, Pub. L. No. 104-88, §§ 101, 201, 109 Stat. 803, 804, 932 (1995).

⁸⁵ See U.S. Dep't of Transp., *Overview of the STB*, SURFACE TRANSP. BD., <http://www.stb.dot.gov/stb/about/overview.html> (last visited Feb. 3, 2011). Congress established the Interstate Commerce Commission ("ICC") in 1887 to limit the tremendous monopoly powers held by the railroad industry over the communities they served and through the shipping market. See H.R. REP. NO. 104-311, at 90 (1995). However, by the 1970s, the once dominant position transformed into one of weakness due to competition from other modes of transportation, like trucking, pipelines, and barges. *Id.* In a rescue effort for the nation's railways, Congress began to deregulate the shipping sector of the transportation industry. *Id.* at 82, 90-91.

⁸⁶ See H.R. REP. NO. 104-311, at 93 (1995).

⁸⁷ 49 U.S.C. § 10901 (2006). According to the STB, most carriers submit a two-part document as part of the application. See U.S. Dep't of Transp., *Construction Cases*, SURFACE TRANSP. BD., http://www.stb.dot.gov/stb/public/resources_construct.html (last visited Feb. 3, 2011). The first part contains the application, and the second includes a request for an exemption from the formal application procedures pursuant to § 10502 of the U.S. Code. *Id.* Should the board grant the exemption based on the necessity of the

many projects will need to include the appropriate environmental documents discussed later in this article.⁸⁸ Upon completing the appropriate environmental documents and submitting an application, the STB will thoroughly examine the records to decide the appropriate measures based on the proposal and whether to grant authority to the applicant to proceed.⁸⁹

Furthermore, the STB maintains authority to provide relief under the federal preemption doctrine with regard to railroad operations that face obstacles by state and local government actions.⁹⁰ In its past decisions, the board continually supported the notion of preemption when state and local governments conflicted with railroad activities sanctioned by the STB or within matters directly regulated by it.⁹¹ With this in mind, the STB recently issued and reaffirmed its declaratory orders concerning its authority when asked to regulate the tracks used in HSR.⁹²

In these proceedings, the STB affirmed its exclusive jurisdiction over “transportation by rail carriers” that utilize any

increased service, then the applicant will receive a conditional grant of authority dependent on a later evaluation of the environmental impacts assessment. *Id.*

⁸⁸ See U.S. Dep’t of Transp., *supra* note 87; see also *infra* Part V.

⁸⁹ 49 C.F.R. § 1105 (2010).

⁹⁰ See *infra* Part IV.B (discussing the preemption doctrine); see, e.g., *City of Auburn v. Surface Transp. Bd.*, 154 F.3d 1025, 1029–31 (9th Cir. 1998) (holding that state and local environmental and land use permitting are preempted); *Joint Petition for Declaratory Order—Boston and Me. Corp. & Town of Ayer, MA*, 5 S.T.B. 500, 506–07 (2001) (No. 33971), *aff’d*, *Boston & Me. Corp. v. Town of Ayer*, 206 F. Supp. 2d 128 (D. Mass. 2002) (holding that state and local permit requirements and environmental review of construction and operation of railroad intermodal facility are preempted); *Petition for Declaratory Order—N. San Diego County Transit Dev. Bd.*, 6 S.T.B. 331, 338–39 (2002) (No. 34111) (holding that a city cannot, on its own, prevent a railroad from reactivating and operating over a line not authorized for abandonment).

⁹¹ See *supra* note 90.

⁹² See generally *Petition for Declaratory Order—DesertXpress Enterprises, LLC*, 2007 WL 1833521 (2007) (No. 34914), available at http://www.stb.dot.gov/decisions/readingroom.nsf/51d7c65c6f78e79385256541007f0580/0cec0b2f00b4e90d85257306006c9f38?OpenDocument#_ftnref5; *Petition for Declaratory Order—DesertXpress Enterprises, LLC*, 2010 WL 1822102 (2010) (No. 34914), available at http://www.stb.dot.gov/decisions/readingroom.nsf/WebDecisionID/40043?OpenDocument#_ftn5.

track contained in the interstate rail network pursuant to § 10501(b) of the enabling legislation.⁹³ The board found that the construction of new tracks as well as the operation of a HSR carrier over interstate lines would require STB approval and trigger the preemption doctrine when considering the different environmental requirements.⁹⁴ This led the STB to conclude that an HSR project need only comply with federal environmental statutes in lieu of those requirements imposed by a state.⁹⁵ Since HSRs categorically fall within the oversight of the STB, any project looking to extend or to construct and operate a passenger service will need to comply with these procedures first.

Hence, Congress and the DOT divide the responsibilities of overseeing HSR between the FRA and the STB, where one oversees the nation's existing rail infrastructure and the construction of new lines while leaving the safety aspects, policy considerations, funding mechanisms, and the introduction of new technology to the other agency.

B. *Environmental Protection Agency (EPA)*

Aware that 31.5% of all greenhouse gases emanate from transportation sources, the fastest growing origination point of emissions in the country,⁹⁶ the EPA began examining the different

⁹³ See Petition for Declaratory Order—DesertXpress Enterprises, LLC, STB Finance Docket No. 34914 (STB served June 27, 2007), *available at* http://www.stb.dot.gov/decisions/readingroom.nsf/51d7c65c6f78e79385256541007f0580/0cec0b2f00b4e90d85257306006c9f38?OpenDocument#_ftnref5.

⁹⁴ *Id.*

⁹⁵ *Id.* This approach falls in line with the original intent of Congress, since the legislative history shows the desire to completely preempt state regulation of railroads. H.R. REP. NO. 104-311, at 95–96 (1995), reprinted in 1995 U.S.C.C.A.N. 793, 807–08.

⁹⁶ Proposed Rulemaking To Establish Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards, 74 Fed. Reg. 49,454, 49,508 (2009). When creating its statistics, the agency “include[s] automobiles, highway heavy duty trucks, airplanes, railroads, marine vessels and a variety of other sources.” *Id.* Interestingly, the transportation sector ranks second in greenhouse gas emissions to the electricity generation area that produces 33.7% of the overall pollution. *Id.*

modes in this sector as a precursor to regulatory actions.⁹⁷ These actions under the Obama Administration led the EPA to follow the directive given by the United States Supreme Court in *Massachusetts v. EPA*,⁹⁸ where the Court had held that greenhouse gas emissions require regulatory action under the Clean Air Act.⁹⁹

However, the EPA had taken an active role in HSR projects prior to the Obama administration. During the Bush Administration, the EPA went on record as supporting HSR in a letter written to the FRA that explained:

[The] EPA is supportive of a high-speed train system for California and the potential for this project to reduce motor vehicle and airplane emissions. EPA requested to be a cooperating agency in this NEPA process and has been working with FRA and CHSRA to address the potential environmental impacts of the project as outlined in a July 2003 Interagency Memorandum of Understanding (MOU).¹⁰⁰

In addition, the EPA continues to show involvement in bringing HSR to the nation as a solution from a financial standpoint.¹⁰¹ At the beginning of 2010, the EPA's Administrator, Lisa Jackson, took a prominent role when she delivered stimulus money for HSR projects in North Carolina.¹⁰²

Realizing the potential that HSRs could substantially contribute to the ambitions of promoting better alternatives for the complex relationship between transportation issues and the goal to reduce greenhouse gas emissions, the EPA will undoubtedly get involved on many levels through regulations, technical support, and the symbolic delivery of federal funds as the nation gets closer to implementing and operating this mode.

⁹⁷ See Darren A. Prum & Sarah L. Catz, *Greenhouse Gas Emission Targets and Mass Transit: Can the Government Successfully Accomplish Both Without a Conflict?*, 51 SANTA CLARA L. REV. 935, 941 (2011).

⁹⁸ 549 U.S. 497 (2007).

⁹⁹ See *id.* at 533.

¹⁰⁰ Letter from Enrique Manzanilla, Dir. of Communities and Ecosystems Division, EPA, to Mark Yachmetz, Assoc. Adm'r of R.R. Dev., FRA Region IX (Oct. 24, 2005) (on file with author).

¹⁰¹ See Ray Gronberg, *EPA chief to deliver news on rail bucks*, THE HERALD SUN (Jan. 28, 2010), http://www.heraldsun.com/view/full_story/5680887/article-EPA-chief-to-deliver-news-on-rail-bucks.

¹⁰² *Id.*

Thus, the federal government recognizes the DOT as the primary governmental branch capable of completing the HSR vision for the country despite constraints by the permissible bounds set forth by the EPA with respect to the environmental impacts of such an endeavor.

IV. REAL PROPERTY ISSUES

When considering the real property implications of a HSR project, those involved will need to resolve the issues associated with “Right of Way” (“ROW”) and those issues emanating out of land use regulation through state and local governments. Since a HSR operation will need to run trains between destinations over land, the real property use and acquisition rights in conjunction with local land use regulations will affect the project. Thus, this discussion will first evaluate ROW issues for using existing tracks and obtaining new ones. Then, it will address the effect of existing land use regulations.

A. *Right of Way*

Frequently, many people use the term ROW when discussing real property interests as applied to railroads. However, the term may cause confusion since it maintains two different meanings when used in conjunction with railroads.¹⁰³ The United States Supreme Court defines ROW as “a right belonging to a party, a right of passage over any tract; and it is also used to describe that strip of land which railroad companies take upon which to construct their roadbed.”¹⁰⁴ With this definition in mind, a railroad looking to complete an HSR project will need to acquire or utilize the existing ROWs as part of its plan to deliver passenger services.

Given the numerous requirements to operate a HSR service, a proposal must address acquiring new ROWs, as well as the use of existing ones, in order for the project to proceed. Of course, the selection of a technology for HSR will also help set a directional tone. In situations where the HSR operator chooses tilt technology, the train may function with limitations on

¹⁰³ *Territory of N.M. v. U.S. Trust Co. of N.Y.*, 172 U.S. 171, 181 (1898).

¹⁰⁴ *Joy v. St. Louis*, 138 U.S. 1, 44 (1891).

conventional rail systems while still providing service.¹⁰⁵ This feature allows a proposed HSR operator utilizing this type of technology to employ a strategy that uses existing infrastructure, such as stations, while upgrading or developing the new rail and railbed for higher speeds. In contrast, the maglev technology demands its own unique guideway and stations in its operation. In spite of this limitation, existing ROWs may be utilized through some form of combined use. The applicable legal environments surrounding the implementation of HSR ROWs require explanation.

1. *Existing or Freight Track*

Depending on a given project's route, the organization operating the HSR may be able to utilize existing ROWs. To accelerate the planning and development process on routes where some type of ROW already exists, Congress gave the Secretary of Transportation authority to allow for collocating systems within the federal-aid highway ROWs.¹⁰⁶ This directive requires that the locations with sufficient land or air space surrounding existing ROWs for highways constructed using federal money accommodate needs for passenger, commuter, HSR, or maglev systems and facilities, so long as they do not adversely affect automotive safety.¹⁰⁷ Likewise, state statutes also reflect this approach and allow the collocation of HSR with available land and airspace surrounding existing ROWs for highway purposes.¹⁰⁸

In other circumstances, the organization operating the HSR might need to gain access to privately owned freight railroad track. If the operator is Amtrak, it may utilize its unique authority pursuant to the Rail Passenger Service Act of 1970 that relieved the existing railroads of passenger service requirements in exchange for giving the new passenger rail company the statutory right to force its way onto any existing line if warranted based on

¹⁰⁵ See Austl. Acad. of Sci., *supra* note 16.

¹⁰⁶ 23 U.S.C. § 142(f) (2006).

¹⁰⁷ *Id.* The statute states that the use may occur "with or without charge to publicly and privately owned" operators. *Id.*

¹⁰⁸ See, e.g., CAL. STS. & HIGHWAY CODE § 104.12(b) (2001).

the public's demand for a given route.¹⁰⁹ However, this authority is solely reserved for Amtrak and not other passenger railroad operators.¹¹⁰ This leaves all other operators at the mercy of freight track owners to gain access, especially in densely populated, urban locations.

Moreover, a passenger rail organization looking to utilize condemnation proceedings to gain an existing ROW will find preemption by federal law if the action unreasonably burdens the ability of the freight railroad operator to complete its common carrier responsibilities associated with interstate commerce.¹¹¹ As a result, any organization other than Amtrak looking to enter an agreement with an existing freight railroad operator for use of its ROW starts from a weakened bargaining position.

To this end, the freight railroad track owners require indemnification from the passenger rail operators for liability in case an injury occurs.¹¹² They do so because Amtrak voluntarily set the standard in the past and for the reason that no adverse consequences will occur to them if they fail to allow access to their tracks. Furthermore, by taking these actions, the freight track owners shift the financial liability and the associated costs to passenger operators.

Absent a change in policy, these costs and liabilities placed on a non-Amtrak operator may have serious financial impacts to the viability of the HSR operation while giving Amtrak the opportunity to later enter a market with distinct cost advantages.

¹⁰⁹ Railway Passenger Service Act of 1970, Pub. L. No. 91-518, 84 Stat. 1327.

¹¹⁰ *See id.*

¹¹¹ 49 U.S.C. § 10501(b) (2006).

¹¹² U.S. GOV'T. ACCOUNTABILITY OFFICE, INTERCITY PASSENGER RAIL: NATIONAL POLICY AND STRATEGIES NEEDED TO MAXIMIZE PUBLIC BENEFITS FROM FEDERAL EXPENDITURES 148 (2006). Interestingly, Amtrak began contractually indemnifying owners of track from injuries "resulting from any damages that occur to Amtrak passengers, equipment, or employees regardless of fault if an Amtrak train is involved" to protect the freight railroad companies. *Id.* However, older agreements by Amtrak do not contain this language. *See generally* Nat'l R.R. Passenger Corp. v. Consol. Rail Corp., 698 F. Supp. 951, 972 (D.D.C. 1988), *vacated*, 892 F.2d 1066 (D.C. Cir. 1990) (providing a history of Amtrak indemnity agreements).

2. *Obtaining New Ones*

While existing ROWs may provide immediate assistance, a HSR project will undoubtedly need to obtain new ones during the course of its development. In those cases calling for new ROWs, a railroad company needs authority via a state statute or through its charter to validly acquire land.¹¹³ With the proper authority, a railroad company may then obtain property interests through the use of grants, purchase agreements, adverse possession, or by condemnation.¹¹⁴

Generally, deeds connected with railroad right of ways present difficulties associated with their scope.¹¹⁵ Frequently, the language used to convey the property interest will prove problematic, or sometimes the level and character of the railroad operations will dictate a result.¹¹⁶ One scholar concluded that, without uniformity in the courts with respect to guidance on necessary instruments, a consistently applied framework for resolution would be unattainable.¹¹⁷

As for the condemnation approach in these cases, the Fifth Amendment of the Constitution forbids a governmental taking of private property “for public use without just compensation.”¹¹⁸ This method also applies to the states through the Fourteenth Amendment. Prior to the ratification of the Fourteenth Amendment in 1868, however, many state courts developed their own doctrine in cases involving the taking of private property for railroads.¹¹⁹

¹¹³ See 65 Am. Jur. 2d *Railroads* § 42 (2012).

¹¹⁴ *Id.*

¹¹⁵ ROGER A. CUNNINGHAM, ET. AL., *THE LAW OF PROPERTY* § 8.9 (2nd ed. 1993).

¹¹⁶ *Id.* The confusion occurs when the conveyance instrument uses such words as “land,” “strip,” and “right of way” coupled with intentions like “for railway purposes.” *Id.* Other times, the railroad operations will prohibit a servient estate from enjoying the shared use allowed under an easement situation. *Id.*

¹¹⁷ *Id.*

¹¹⁸ U.S. CONST. amend. V.

¹¹⁹ See *In re Albany St.*, 11 Wend. 149, 151–52 (N.Y. Sup. Ct. 1834). The United States Supreme Court explained that the federal government did not begin to assert its eminent domain powers until the late nineteenth century. See

In one of the early cases involving the exercise of state constitution's public use provision, New York's highest court permitted the government to transfer the private property of one person to a non-publicly owned railroad company in order to construct railroad tracks.¹²⁰ The court gave a dual rationale that the public would benefit from the railroad as well as from the use of the property through the company's services.¹²¹ In other cases, the courts in other jurisdictions followed the precedential requirement that mandated the government to show actual use by the general public but later expanded the definition to advance transportation and industrialization.¹²² Accordingly, some state courts required actual use while others accepted public benefit for railroad condemnation cases; however, the United States Supreme Court reiterated its contention that it favors giving governments extensive leeway when evaluating the public needs in the context of its takings powers.¹²³

Thus, an HSR entity with proper authority may turn to a number of different strategies in acquiring property interests in order to develop a transportation project that qualifies as a "national rail passenger system."

B. *State & Local Land-Use Regulations*

In the context of land use, a HSR project will find itself in the center of a jurisdictional struggle between the traditional police

Kelo v. City of New London, 545 U.S. 469, 511–12 (2005). As such, the state governments of the time chose to act under their own constitutional takings provisions instead of the federal one because the Fifth Amendment did not apply to them until after ratification of the Fourteenth Amendment. *Id.* at 512. *In re Albany St.* provides an interesting interpretation of the New York Constitution's public use requirement, since its language mirrors that of the United States Constitution. Compare N.Y. CONST. of 1821, art. 7, § 7, with U.S. CONST. amend. V; Nathan Alexander Sales, *Classical Republicanism and the Fifth Amendment's "Public Use" Requirement*, 49 DUKE L.J. 339, 345 (1999).

¹²⁰ See *Beekman v. Saratoga & Schenectady R.R.*, 3 Paige Ch. 45, 71–72 (N.Y. Ch. 1831).

¹²¹ *Id.* at 73–75.

¹²² See Laura Mansnerus, Note, *Public Use, Private Use, and Judicial Review in Eminent Domain*, 58 N.Y.U. L. REV. 409, 413 (1983).

¹²³ *Kelo*, 545 U.S. at 483.

powers left to the states and the federal directives given by Congress to the STB with regard to railroads. Frequently, this situation triggers the doctrine of law called preemption based on the Supremacy Clause in Article VI of the Constitution, which makes the federal law the "supreme law of the land."¹²⁴

Depending on the circumstances, Congress may preempt state and local laws in three different manners.¹²⁵ Congress may explicitly choose statutory language, which preempts state law on a specific area of regulation.¹²⁶ On other occasions, Congress may enact legislation that covers the subject matter so thoroughly that no other state or local entity could find room to regulate; this action allows a court to conclude that the federal government exclusively occupies the entire field.¹²⁷ Finally, if federal and state laws clash, and compliance with both becomes impossible, then a court would also find preemption.¹²⁸

As discussed earlier, the STB received its directive via the ICC Termination Act to regulate rail transportation,¹²⁹ while state and local governments traditionally regulate land use under common

¹²⁴ U.S. CONST. art. VI, § 1, cl. 2 ("This Constitution, and the Laws of the United States which shall be made in Pursuance, thereof ... shall be the supreme Law of the Land ... any Thing in the Constitution or Law of any State to the Contrary notwithstanding.").

¹²⁵ *Pennsylvania v. Nelson*, 350 U.S. 497, 502-06 (1956); *see supra* notes 61-63.

¹²⁶ *N.Y. State Dep't of Soc. Servs. v. Dublino*, 413 U.S. 405, 413 (1973).

¹²⁷ *Fid. Fed. Sav. & Loan Ass'n v. De la Cuesta*, 458 U.S. 141, 153 (1982). Further clarifying this type of preemption, the Supreme Court developed a two part investigation for determining whether federal laws will generate "field" preemption over state regulations. *Id.* The first part requires the courts to look into the legislative history for the Congressional purpose for passing the law. *Id.* Once completed, the court must turn to assessing whether the state law includes "a field in which the federal interest is so dominant that the federal system will be assumed to preclude enforcement of state laws on the same subject." *Id.* (quoting *Rice v. Santa Fe Elevator Corp.*, 331 U.S. 218, 230 (1947)).

¹²⁸ *Fla. Lime & Avocado Growers, Inc. v. Paul*, 373 U.S. 132, 142-43 (1963). In these situations, the Supreme Court explains that the state laws "stand as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress." *Hines v. Davidowitz*, 312 U.S. 52, 67 (1941).

¹²⁹ *See supra* Part III.A.2.

law authority.¹³⁰ Accordingly, the courts and the STB developed two different approaches to provide guidance in those situations where the two doctrines collide. One approach applies the “integral to interstate operations” test while other jurisdictions evaluate whether the local requirement impedes the interstate activities of the railroads.¹³¹

In those jurisdictions using the “integral to interstate operations” test, the state and local government must refrain from all “pre-clearance requirements (including environmental requirements)” on integral facilities “because by their nature [the requirements] interfere with interstate commerce by giving the state or local body the ability to deny the carrier the right to construct facilities or conduct operations.”¹³² This method forces the STB to intensively evaluate each situation and use the subtle differences in a particular circumstance for determining how integral certain aspects are to the railway operations.¹³³

By contrast, the other approach followed by the Eleventh Circuit assessed the degree to which local requirements obstructed the interstate operations of the railroads.¹³⁴ The Eleventh Circuit applied a municipal ordinance to a lessee of railroad property who had operated an aggregate distribution center.¹³⁵ The court explained that, by allowing the application of the municipal ordinance to the lessee, the compliance requirements did “not

¹³⁰ ROGER A. CUNNINGHAM ET. AL., *THE LAW OF PROPERTY* § 9.2 (2nd ed. 1993).

¹³¹ Compare *Green Mountain R.R. v. Vermont*, 2003 WL 24051562, at *4 (D. Vt. 2003), with *Fla. E. Coast Ry. Co. v. City of W. Palm Beach*, 266 F.3d 1324, 1337–39 (11th Cir. 2001).

¹³² Joint Petition for Declaratory Order—Boston and Me. Corp. & Town of Ayer, MA, 5 S.T.B. 500, 507 (2001) (No. 33971).

¹³³ See Petition for Declaratory Order—Borough of Riverdale v. N.Y. Susquehanna & W. Ry. Corp., 4 S.T.B. 380 (1999) (No. 33466); Joint Petition for Declaratory Order—Boston & Me. Corp. & Town of Ayer, MA, *supra* note 132. In these fact specific determinations, the STB found that an automobile facility adjacent to the railway qualified as integral to operations while a corn processing plan did not.

¹³⁴ See *Fla. E. Coast Ry. Co. v. City of W. Palm Beach*, 266 F.3d 1324, 1337–39 (11th Cir. 2001).

¹³⁵ *Id.*

burden [the railroad] with the patchwork of regulation that motivated the passage of the ICCTA.”¹³⁶

However, the STB explained that the legislation fails to preempt a state and local government’s police powers when health and safety codes apply.¹³⁷ In these circumstances, the STB clarified that local governments maintain the right to enforce electrical and building codes, and they “can take actions that are necessary and appropriate to address any genuine emergency on railroad property”¹³⁸ Furthermore, the STB suggested:

[E]ven in cases where we approve a construction or abandonment project, a local law prohibiting the railroad from dumping excavated earth into local waterways would appear to be a reasonable exercise of local police power. Similarly, . . . a state or local government could issue citations or seek damages if harmful substances were discharged during a railroad construction or upgrading project. A railroad that violated a local ordinance involving the dumping of waste could be fined or penalized for dumping by the state or local entity. The railroad also could be required to bear the cost of disposing of the waste from the construction in a way that did not harm the health or well being of the local community.¹³⁹

As a result, most railroad operations within the jurisdiction of the STB’s oversight avoid the majority of state and local laws under the preemption doctrine, so the regulatory situation remains mostly at the federal level.¹⁴⁰ Hence, the real property issues will create an obstacle for an operator on many fronts since questions surrounding indemnification, ROW, and most likely track upgrades and maintenance play such a huge role in a HSR endeavor.

¹³⁶ *Id.* at 1339.

¹³⁷ *Flynn v. Burlington N. Santa Fe Corp.*, 98 F. Supp. 2d 1186, 1189–90 (E.D. Wash. 2000).

¹³⁸ See *Petition for Declaratory Order—Borough of Riverdale v. N.Y. Susquehanna & W. Ry. Corp.*, *supra* note 133.

¹³⁹ *Petition for Declaratory Order—Cities of Auburn and Kent, WA—Burlington N. R.R. Co.—Stampede Pass Line*, 2 S.T.B. 330, 339 (1997) (No. 33200), available at [http://www.stb.dot.gov/Decisions/ReadingRoom.nsf/UNID/B26FB83F6415CF9B85256548007842F8/\\$file/21005.pdf](http://www.stb.dot.gov/Decisions/ReadingRoom.nsf/UNID/B26FB83F6415CF9B85256548007842F8/$file/21005.pdf).

¹⁴⁰ See *supra* Part IV.B.

V. ENVIRONMENTAL LEGISLATION

Due to the direct and indirect impacts of a HSR project on the environment, any entity looking to operate this type of passenger rail service will need to comply with the appropriate legislation on both a state and federal level. Generally, the federal directives will provide all of the guidance for compliance. However, in some instances where an HSR project occurs solely within a state, additional jurisdictional mandates may demand further requirements. As such, we will examine the federal requirements and the unique situation created by California's HSR project.

A. *Federal*

On a federal level, the most overarching piece of legislation is the National Environmental Policy Act (NEPA).¹⁴¹ NEPA compels analysis on the environmental impact of an agency's projects at the earliest point in time at which the analysis provides meaning.¹⁴² It further allows an agency the discretion to determine the appropriate environmental process to the kind of decision under consideration.¹⁴³ As such, NEPA requires the FRA to make an informed decision with alternatives as it considers proceeding with an HSR project.

Furthermore, under the regulations put forth by the Council on Environmental Quality, a federal agency conducting a NEPA study may encompass findings from a more general evaluation into the more detailed environmental analysis.¹⁴⁴ This action, called "tiering," becomes "appropriate when the sequence of statements or analyses is . . . from a program, plan, or policy environmental impact statement to a program, plan, or policy statement or analysis of lesser scope or to a site-specific statement or analysis."¹⁴⁵

¹⁴¹ 42 U.S.C. § 4331 (2006).

¹⁴² *Id.*

¹⁴³ *Id.*

¹⁴⁴ 40 C.F.R. § 1508.28 (2008).

¹⁴⁵ *Id.*

Interestingly, the FRA decided to approach HSR with a two-tiered environmental review process under NEPA.¹⁴⁶ In the first step of the process, known as a Tier 1 Environmental Impact Statement (EIS), an assessment of the alternatives occurs at the program level.¹⁴⁷ The study takes a macro level approach to identify known and potential environmental issues for further evaluation, the proper HSR technology for the project, and siting for the corridor as well as the stations.¹⁴⁸ In compiling the study, the evaluators cast a wide net that may range from 300 feet to six miles wide along the designated route to allow for many different alternatives.¹⁴⁹ This large range provides the later Tier II study considerable discretion in order to avoid and minimize environmental impacts while reducing footprints in the final design.¹⁵⁰ Should the agencies agree to further pursue the project, the efforts then turn to the second tier for a more site-specific analysis.¹⁵¹

In the Tier II study phase, the evaluation will examine more precisely the specific segments of the project corridor alternatives, station locations, number of train stops, and non-action alternatives through additional research, coordination and field surveys.¹⁵² Based on these findings, more extensive agency coordination will occur and, if the environmental documentation is appropriate, permits will possibly be secured.¹⁵³ Once all of the agencies agree

¹⁴⁶ See, e.g., Fed. R.R. Admin., *Record of Decision, Tier 1 Southeast High Speed Rail Project*, 1 (Nov. 20, 2002), available at <http://www.sehsr.org/reports/RODFinal.pdf> [hereinafter *Southeast HSR Tier 1 ROD*]; Fed. R.R. Admin., *Record of Decision, California High Speed Train System 1* (Nov. 18, 2005), available at <http://www.fra.dot.gov/downloads/RRDev/hstrod.pdf> [hereinafter *CA Tier 1 ROD*].

¹⁴⁷ See *Southeast HSR Tier 1 ROD*, *supra* note 146, at 1; *CA Tier 1 ROD*, *supra* note 146, at 3.

¹⁴⁸ See *Southeast HSR Tier 1 ROD*, *supra* note 146, at 2; *CA Tier 1 ROD*, *supra* note 146, at 3.

¹⁴⁹ See *Southeast HSR Tier 1 ROD*, *supra* note 146, at 2.

¹⁵⁰ *Id.*

¹⁵¹ See *Southeast HSR Tier 1 ROD*, *supra* note 146, at 2; *CA Tier 1 ROD*, *supra* note 146, at 3.

¹⁵² See *Southeast HSR Tier 1 ROD*, *supra* note 146, at 2; *CA Tier 1 ROD*, *supra* note 146, at 2.

¹⁵³ See *Southeast HSR Tier 1 ROD*, *supra* note 146, at 2.

to proceed based on the Tier II study, the NEPA requirements become satisfied.

Examples of the Tier I phase recently occurred in the southeastern region of the U.S. and in California.¹⁵⁴ In these cases, all involved decided to select HSR over other alternatives like upgrading highways and airports or ceasing to take action.¹⁵⁵ As a result, these two efforts provide a good framework for other efforts across the country looking to begin the HSR process in their jurisdiction. Hence, an HSR project will need to successfully navigate through the two-part NEPA analysis as determined by the FRA. Then the project will need to conclude that it provides the best solution in terms of mode and route over other alternatives with the least impact upon the environment.

B. *State*

When considering the applicability of environmental legislation that emanates from a state, the shadows of the preemption doctrine loom large.¹⁵⁶ In situations in which state and federal requirements conflict, to avoid undesirable effects of the doctrine, the state governments must enact laws with stronger requirements or apply them in a broader manner while not disturbing the existing federal legislation serving as the axiomatic foundation for regulatory measures.¹⁵⁷

California, providing a good example of where HSR might avoid a preemption challenge, maintains some of the most stringent emission and land use standards through its recent legislation, Assembly Bill 32 ("AB 32") and Senate Bill 375 ("SB 375").¹⁵⁸ By virtue of its geography and economic base, the jurisdiction sits in the unique situation where it can benefit from a

¹⁵⁴ See generally *Southeast HSR Tier 1 ROD*, *supra* note 146; *CA Tier 1 ROD*, *supra* note 146.

¹⁵⁵ See generally *Southeast HSR Tier 1 ROD*, *supra* note 146; *CA Tier 1 ROD*, *supra* note 146.

¹⁵⁶ See *supra* Part IV.B.1.

¹⁵⁷ Daniel P. Schramm, *A Federal Midwife: Assisting the States in the Birth of a National Greenhouse Gas Cap-and-Trade Program*, 22 TUL. ENVTL. L.J. 61, 78 (2008).

¹⁵⁸ See generally Prum & Catz, *supra* note 97, at 947–56.

completely intrastate system. California is also trying to make the California High-Speed Rail project a reality within the state while balancing its self-imposed legislation and NEPA.¹⁵⁹

Under AB 32 and SB 375, California attempts to provide an approach that avoids compulsory regulatory programs in exchange for a system that fosters land use and transportation planning in tandem.¹⁶⁰ A major component of SB 375 includes the addition of the Sustainable Communities Strategy (“SCS”) element to the Regional Transportation Plan (“RTP”).¹⁶¹ The SCS outlines how regions will meet greenhouse gas (“GHG”) reduction targets through coordinated land use and transportation planning that supports compact, transit-oriented development.¹⁶² The adequate provision of housing for all income levels is a primary focal point of the SCS, which provides incentives for the development of land close to major transit corridors that is vacant, underutilized, or zoned for a non-residential use.¹⁶³

Under the legislation, metropolitan planning organizations (“MPOs”) receive direction to identify, without reference to existing zoning ordinances or local land use restrictions, all such areas suitable for infill development and increased residential densities.¹⁶⁴ Development projects located in qualifying areas are considered “transit priority” and eligible for exemption from California Environmental Quality Act (“CEQA”) review or a more limited review process, depending on the fulfillment of other criteria.¹⁶⁵

¹⁵⁹ Interestingly, the original California HSR project received an exemption from the California Environmental Quality Act (“CEQA”) when first created in 1982. Robert Cruickshank, *CEQA Exemptions For HSR?*, CAL. HIGH SPEED RAIL BLOG (Mar. 16, 2010), <http://www.cahsrblog.com/2010/03/ceqa-exemptions-for-hsr/>. While the project died one year later, it returned in the mid-1990s, and the CEQA rules became applicable. *Id.*

¹⁶⁰ See Prum & Catz, *supra* note 97, at 956.

¹⁶¹ CAL. GOV’T CODE §§ 65080(b)(2)(B)–(H) (West 2011).

¹⁶² *Id.*

¹⁶³ CAL. PUB. RES. CODE §§ 21155–21155.3 (West 2009).

¹⁶⁴ *Id.*

¹⁶⁵ *Id.*

Furthermore, SB 375 does not override local zoning or land use controls, except in the limited case of affordable housing projects denied approval in regions of the state yet to fulfill their allocation for low- or moderate-income units under the Regional Housing Needs Assessment (“RHNA”).¹⁶⁶ At the same time, the SCS directs each MPO to undertake a formal program and analysis “to identify actions that will be taken to make sites available . . . with appropriate zoning and development standards”¹⁶⁷ and “demonstrate local efforts to remove governmental constraints that hinder the locality from meeting its share of regional housing need”¹⁶⁸

Moreover, SB 375 reforms how state transportation models are generated to better capture the benefits of close-in development, with regional modeling practices subject to review by the California Air Resources Board (“CARB”).¹⁶⁹ MPOs will be encouraged to utilize models that accurately measure the benefits of land use strategies aimed at reducing vehicle trips, such as high-density, mixed-use development with proximity to a transit stop.¹⁷⁰ Under SB 375, traffic impact modeling “should be able to assess the effects of policy choices, such as residential development patterns, expanded transit service and accessibility, the walkability of communities, and the use of economic incentives and disincentives.”¹⁷¹

In the end, it will be local policymakers and planning officials who will “determine the best land uses and regulations conducive to the ‘right’ kind of transit-oriented development (“TOD”) in their communities.”¹⁷² If there is a desire for more intensive development strategies, it should be site-specific and

¹⁶⁶ CAL. GOV’T CODE § 65400 (West 2010).

¹⁶⁷ CAL. GOV’T CODE §§ 65583(c)(1) (West 2011).

¹⁶⁸ CAL. GOV’T CODE §§ 65583(a)(5).

¹⁶⁹ CAL. GOV’T CODE § 14522.1 (West 2009).

¹⁷⁰ *Id.*

¹⁷¹ S.B. 375, 2008 Leg., Reg. Sess. (Cal. 2008).

¹⁷² SARAH L. CATZ & ADAM CHRISTIAN, INST. OF TRANSP. STUDIES, UNIV. OF CAL., IRVINE, THINKING AHEAD: HIGH-SPEED RAIL IN SOUTHERN CALIFORNIA 12 (2010).

involve community outreach.¹⁷³ In fact, “the zoning and land use policies that influence such patterns are subject to the control of individual municipalities along the HSR corridor.”¹⁷⁴

Overall, “the cooperation of municipalities in adopting zoning policies supportive of TOD will in turn provide both opportunities for economic growth and reciprocal ridership benefits for the [California High-Speed Rail] system as a whole”¹⁷⁵ Eventually augmenting the transit user base, the development will facilitate the incorporation of alternative means of transportation into the routines of both residents and commuters.¹⁷⁶

As such, “[HSR] will advance the policy objectives of [California’s] SB 375” and perhaps other legislative initiatives as well.¹⁷⁷ To achieve regional reduction targets set by CARB or comparable agencies in other states, the proliferation of HSR alternatives can divert intraregional commuting trips from auto and air.¹⁷⁸ “Long distance trips undertaken via HSR” connected to any station in the southern California region can contribute to the net reduction requirements in the GHG emissions guidelines currently under development by CARB.¹⁷⁹

Accordingly, “SB 375 strikes a delicate balance between local control and statewide mandates in its quest to encourage denser, more compact development patterns around transit in California, consistent with ‘Smart Growth’ principles” that include a HSR option in the tool bag of solutions.¹⁸⁰ Thus, as a policy that fits within the narrow requirements to avoid a preemption challenge, the California framework provides a good example of a situation where the state can choose to compel or not to enforce its own state environmental laws while supporting on many levels broad based types of solutions like the California High-Speed Rail project.

¹⁷³ *Id.*

¹⁷⁴ *Id.*

¹⁷⁵ *Id.*

¹⁷⁶ *Id.*

¹⁷⁷ *Id.* at 10–11.

¹⁷⁸ *Id.* at 11.

¹⁷⁹ *Id.*

¹⁸⁰ *Id.* at 12.

Therefore, the environmental legislation from the federal government and possibly that of a given state will create additional challenges, while at the same time affording an HSR project the opportunity to offer new solutions to broader ecological and transportation issues.

VI. POLICY ANALYSIS

After electric generation, transportation in the United States is the second largest as well as the second fastest growing source of GHG emissions.¹⁸¹ Smarter transportation policies could reduce congestion and emissions and help revitalize the economy.¹⁸²

As a result, HSR is often mentioned as a solution to reducing congestion, increasing mobility, and helping to clean up the environment through the reduction of greenhouse gas emissions; yet in most jurisdictions, transportation policies fail to take on this issue.¹⁸³ Colin Peppard, the deputy director of Federal Transportation Policy at the Natural Resources Defense Council, echoed this sentiment when he stated, “Most states’ transportation departments seem to be ignoring their important role in stopping climate change If states considered all their transportation policy options, they could tap into tremendous potential to reduce carbon emissions, even with limited resources.”¹⁸⁴

Supporting this notion, a recent report released by Smart Growth America concluded that “[m]ost states do not make any effort at all to connect transportation policy with climate change and energy goals, and some put in place systems that effectively sabotage these goals.”¹⁸⁵ The report found that “current

¹⁸¹ Alex Dodds, *New report: State transportation decisions could save money and reduce carbon emissions*, SMART GROWTH AM. (Dec. 14, 2010), <http://www.smartgrowthamerica.org/2010/12/14/new-report-state-transportation-decisions-could-save-money-and-reduce-carbon-emissions-2/>.

¹⁸² *Id.*

¹⁸³ *Id.*

¹⁸⁴ *Id.*

¹⁸⁵ NEHA BHATT, COLIN PEPPARD & STEPHANIE POTTS, NAT’L RES. DEF. COUNCIL, *GETTING BACK ON TRACK: ALIGNING STATE TRANSPORTATION POLICY WITH CLIMATE CHANGE GOALS 3* (2010), available at http://www.nrdc.org/smartgrowth/files/GettingBackonTrack_report.pdf.

transportation policy in most states will likely worsen [GHG] emission trends in the United States.”¹⁸⁶ As such, if we want to strive for a better transportation system that can reduce carbon emissions at the same time, state and federal transportation policies cannot work at odds with carbon reduction efforts.¹⁸⁷ Otherwise, states are at risk both environmentally and economically.¹⁸⁸

Keeping these perspectives in mind, both direct and indirect economic and environmental benefits of HSR represent an important convergence of policy objectives and an opportunity to shift the terms of the debate by demonstrating how a transformative, large-scale infrastructure project would contribute favorably to both desired outcomes. A project’s positive economic impact deserves a more thorough analysis and understanding by not only regional planners and policymakers but also the public at large.

While many of the states planning for HSR systems have run out of highway capacity and have seen their mobility almost completely diminished,¹⁸⁹ creative solutions still exist; however, they require ingenuity, flexibility, prospective outlook and, most importantly, political will to overcome the financial hesitations. In order to gain and maintain political will, the HSR projects will need to develop a visionary strategy. The projects will also need to form collaborative partnerships with the business, environmental, and community leaders who will come forward in support of the goal.

For example, a project will need to select a particular technology for use on its routes. Many factors will play a role in this decision because maglev and steel wheel technology present different positives and negatives to each set of circumstances. Often, the steel wheel technology receives more consideration over maglev due to its ability to operate on existing track; however, the present rail infrastructure owned by the freight railways will not allow for the higher speeds. The existing track will need upgrades

¹⁸⁶ *Id.*

¹⁸⁷ *Id.*

¹⁸⁸ Dodds, *supra* note 181.

¹⁸⁹ CATZ & CHRISTIAN, *supra* note 172, at 1.

in order to allow for the equivalent speeds of the maglev system, which will erase many of the steel wheel advantages of using the existing infrastructure.

With this premise in mind, the amount of development surrounding the rail line will shape the technological approach. Because the maglev system requires a dedicated guideway, the installation of track within less developed regions of the country or where more wide-open spaces occur correlates very similarly to that of the steel wheel technology making the two options comparable. However, the steel wheel approach fits better within an urban setting because it can utilize existing rail infrastructure with minimal retrofitting needs albeit at a much slower speed.

In other situations where geography plays a role, the additional infrastructure requirements may produce a different analysis. For instance, some parts of the country can benefit from maglev's ability to overcome mountain passes with little need for additional infrastructure like tunnels, while the terrain in other areas can utilize steel wheel technology because of its more level geography.¹⁹⁰ Accordingly, the country's diversity of both urban and rural settings in conjunction with its geographic variety demonstrates that neither technology provides a superior choice in all settings.

Furthermore, the ROW issues will also present a hurdle to HSR projects that are not associated with Amtrak. Because Amtrak chose to indemnify the track owners for possible torts claims, a nongovernmental project choosing to utilize existing freight track will need to overcome this precedent while securing access and possibly the right to upgrade and maintain a better quality of rail line infrastructure. A project will also need to either obtain new ROWs where possible or share track with existing infrastructure to

¹⁹⁰ This issue presents particular difficulty in the desire to run an HSR service between southern California and Las Vegas, Nevada, where terrain and population density support different technologies. The main population base in southern California is located in an urban setting but the mountains and the desert separate it from Las Vegas. Two competing groups plan to serve these areas. One project looks to operate a maglev train to the heart of southern California, while the competition looks to run steel wheel and stop short of the mountains in the high desert.

fulfill its high-speed mission. As such, both of these hurdles provide significant concerns towards accomplishing the HSR goal, but the financial model used to operate the HSR can resolve many of these economic issues associated with ROW.

Finally, the concluded Stage 1 NEPA analysis in both the southeast and California-Nevada corridors opted for HSR instead of other choices, such as improving highways and airports or taking little to no action.¹⁹¹ The fact that two independent macrolevel studies for different projects concluded that HSR offered a better solution over the traditional highway and aviation solutions shows the strength of the overall benefits provided by HSR on both the transportation and environmental aspects.

Thus, the missing element to successfully implementing HSR across the country comes from a lack of political will, both in Congress and at the state level, to foster the appropriate setting because most, if not all, of the identifiable obstacles can be remedied in the comprehensive operating and financial plan.

VII. CONCLUSION

With the foregoing in mind, none of the issues outlined are insurmountable to accomplish the goal of bringing HSR to the United States. However, HSR will not succeed in this country if the different levels of government do not align their transportation, environmental, and economic policies in a unified direction.

Unfortunately, few of the enumerated benefits will occur if transit budgets remain slashed and if states continue to lack a nexus between their transportation, environmental, and economic policies. A HSR system will not reach its potential if rail feeder buses and light and commuter rail services are abandoned. If our leaders are sincere about implementing climate change initiatives, transit should be recognized as the most essential component lending to the reduction of greenhouse gas emissions instead of treated as a mere afterthought. In practical terms, adequate

¹⁹¹ See generally *Southeast HSR Tier 1 ROD*, *supra* note 146; *CA Tier 1 ROD*, *supra* note 146 (concluding in two different projects and geographical areas after thorough analysis that HSR would be better than alternative action or no action at all).

funding must be preserved to promote all modes of public transportation.

To this end, the foundational elements that justify HSR's existence need continued support by all levels of government. In order to successfully implement a HSR system in this nation, the many opponents will need proof that HSR is a system that not only can be built in a sustainable, responsible, and efficient manner but also follows the environmental guidelines of NEPA and relevant state laws while lowering travel times, increasing mobility, and reducing congestion and emissions.

Hence, the Obama Administration created the initial momentum to take control of some of the many global warming issues, while pushing for a cleaner energy policy throughout the country by investing in a smarter and greener transportation infrastructure such as HSR. HSR was expected to reduce air pollution, but also to create indirect benefits such as decreasing the dependence on foreign oil, spurring economic development throughout the United States, and creating thousands of jobs. At this point in time, the jury is still out.

