16 September 2021

Via Electronic Filing
Hon. Blake Hawthorne, Clerk
Supreme Court of Texas
201 West 14th Street, Room 104
Austin, Texas 78701

Re: Amicus Curiae Letter re: *James Fredrick Miles v. Texas Central Railroad & Infrastructure, Inc. and Integrated Texas Logistics, Inc.*; Case No. 20-0393

Dear Mr. Hawthorne and the Honorable Justices of the Supreme Court:

I am a senior fellow at the Cato Institute, a non-profit think tank founded on the principles of individual liberty, limited government, free markets, and peace. My own focus is on transportation and land-use planning, and I have spent 47 years reviewing a wide variety of transportation plans, including plans by federal agencies, state departments of transportation, metropolitan governments, cities, and private companies.[1] I've reviewed high-speed rail plans, highway plans, conventional intercity rail plans, urban transit plans, and bikeway plans.[2] For the reasons explained below, I believe the Court should grant review of Mr. Miles' petition. I have paid all costs and fees incurred in preparing this amicus curiae letter.

Recently, I reviewed several private high-speed rail plans in the United States, including Respondent Texas Central's plan, Brightline in Florida, and the Desert Xpress between Los Angeles and Las Vegas.[3] Of the three, the only one that was possibly viable was Brightline, partly because it isn't true high-speed rail and therefore will cost much less to build and partly because the Miami-Orlando train has a market of 10 to 15 million cruise ship passengers a year landing in Miami and Ft. Lauderdale, many of whom will want to go to Orlando to visit Disney World and other attractions. If the coronavirus pandemic greatly reduces cruise ship traffic, however, Brightline will fail.

Neither the Desert Xpress nor Texas Central have similar potential markets. As true high-speed rail proposals, they will be very expensive to build. As such, they will be unable to compete with air travel, which requires much less infrastructure and therefore can offer higher-speed transportation at much lower fares.

In 2012, Texas Central representatives estimated that building a high-speed rail line between Houston and Dallas would cost $10 billion.[4] Later this estimate rose and the company's latest statements say it will cost $24 billion.[5] However, company executives have also been quoted saying that that $30 billion was "a conservative estimate."[6]

This is an example of *optimism bias*, and it betrays a naivete about large rail projects, which are almost always more expensive than planners originally project. The California high-

speed rail project, for example, was originally projected to cost $25 billion.[7] Current projections are over $100 billion.[8] In a series of reports published between 1990 and 2000, the Department of Transportation compared the projected and actual costs of 67 passenger rail projects. Almost all of them ended up costing at least 10 percent more than was originally projected, and the average cost was 37 percent greater than projected.[9]

One reason for the high cost is that high-speed rail requires extremely precise construction standards, precision that isn't required for, say, highways or airport runways. Such precise construction standards end up costing much more than infrastructure for competitive modes of travel.

Texas Central has not released its ridership analysis, but it says that the analysis projects "more than 6 million passengers" in 2029 increasing to "more than 13 million by 2050."[10] These numbers are also likely to suffer from optimism bias; Department of Transportation studies have found that most passenger rail projects built in the United States end up carrying far fewer riders than originally projected.[11]

Moreover, once built, ridership rarely grows much beyond the first year, and even more rarely does it double in 21 years. For example, Baltimore's subway was predicted to carry 103,000 riders per weekday but only carried 43,000 when it first opened in 1988. In 2009, 21 years later, it carried 45,390 riders per day, a 6 percent increase.[12] Buffalo's light-rail line carried 19,398 riders per day when it first opened in 1989. In 2010, 21 years later, it carried 21,592, an 11 percent increase.[13] Los Angeles' subway was projected to carry more than 297,000 riders per weekday when it first opened in 2002; it carried only 134,555. In 2019, 17 years later, it carried 137,201 trips per weekday, a 2 percent increase.[14] It clearly will not double ridership after 21 years.

Another indicator that Texas Central has overestimated ridership can be found in Amtrak's high-speed *Acela* between New York-Washington and New York-Boston. In 2019, it carried fewer than 3.6 million riders.[15] The New York-Washington and New York-Boston routes are both comparable in length to the Dallas-Houston route. Amtrak trains aren't as fast as those planned by Texas Central, but Amtrak serves a much higher population base: nearly 39 million people between Boston and Washington in 2019 vs. less than 12 million people in Dallas-Houston. While Dallas and Houston populations will grow, they aren't likely to reach 39 million people by 2050, much less by 2029. Thus, the 6 million ridership projection for 2029 seems optimistic.

Texas Central's ridership projections don't mention fares. Demand is not a point, such as "more than 6 million." Instead, it is a line indicating different quantities consumed at different prices. Texas Central has not revealed the fares that were assumed for the analysis that predicted more than 6 million riders in 2029 and more than 13 million in 2030, but whatever those fares were, they were based on early projections of construction costs, such as when the cost was expected to be $10 billion rather than $24 billion or $30 billion.

Amtrak's high-speed *Acela* fares average nearly $1 per passenger-mile.[16] Those fares cover the operating cost of the trains, but a 2010 report from the Northeast Corridor Master Plan Working Group (a consortium of passenger railroads, including Amtrak, that use the Boston-Washington route) says that the tracks Amtrak uses have a $52 billion capital replacement backlog.[17] A 2021 update to that report says that the corridor needs $117 billion.[18]

These reports show that, even at nearly $1 per passenger-mile, Amtrak's high-speed train cannot cover its capital costs. The same will be true for the Texas Central, especially since Texas Central will need to build its line from scratch while Amtrak's line is an upgrade of existing railroad tracks. Moreover, the Texas Central, unlike Amtrak's *Acela*, will not be able to share its tracks with other trains that share the burden of the capital costs of the route.

Texas Central says that it will use a yield management system similar to the airlines, in which the first tickets sold for any trip will go for a low price, and later tickets sold will cost more. The question is whether the average price of tickets sold can possibly be sufficient to cover the debt service and the operating cost of the trains while still be competitive with airfares.

At 6 million riders per year, the average fares per rider would have to be more than $250 to cover the debt service on $30 billion of construction costs. At the original projected cost of $10 billion, fares would have had to average $85 to cover debt service, but at $24 billion, the fares would have to be more than $200. This only counts debt service; the operating cost would be roughly $100 more per ticket.

At least three different airlines have multiple flights per day between Dallas and Houston at airfares ranging between $59 and $267.[19] The average is probably well under $200, which means that Texas Central might have been able to compete if the construction cost had been $10 billion but cannot possibly compete at construction costs of $24 billion to $30 billion.

In 2019, airlines in the United States were profitable collecting airfares averaging less than 19 cents per passenger-mile.[20] For comparison, Amtrak has been highly unprofitable collecting rail fares averaging 35 cents per passenger-mile for all its trains.[21] While average airfares include long-distance flights and costs and fares on short-haul flights are higher, airfares tend to be much lower than rail fares due to the airlines' lower infrastructure costs.

In addition to lower infrastructure costs, the airlines have two other advantages over Texas Central. First, there are two airports each in Dallas and Houston, so more people in each urban area will be located near one of the airports than near a train station. This means the market for train travel will be effectively smaller than the market for air travel.

Second, the airlines have much deeper pockets because they earn revenues from many different routes other than Dallas-Houston while Texas Central will be limited to revenues from this one rail line. Due to their lower infrastructure costs, the airlines won't have to engage

in below-cost pricing to compete with high-speed trains, but they could if they wanted to, which would quickly force Texas Central into bankruptcy.

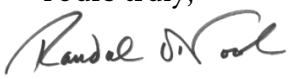
Based on this review of potential revenues and costs, private investors are not going to be willing to fund the Texas Central plan. The backers of the Los Angeles-Las Vegas high-speed trail received approval to sell tax-exempt private activity bonds to fund their project and found no buyers for the bonds.[22] The same is almost certain to happen to the Texas Central.

Texas Central officials have admitted that they are now counting on getting a Railroad Rehabilitation and Improvement Financing (RRIF) loan through the federal government to fund $12 billion of their construction costs.[23] This would still require $12 billion to $18 billion in private funding, which is unlikely. However, the federal government is also unlikely to give Texas Central $12 billion in RRIF loans.

Congress has limited the total amount of RRIF loans the Department of Transportation is allowed to make to $35 billion. The largest RRIF loan given out to date was $2.45 billion, less than a quarter of what Texas Central says it will apply for.[24] Even if Texas Central were a viable project, which it is not, the Department of Transportation is not likely to make a $12 billion RRIF loan considering that would consume more than a third of its authority to make such loans.

In short, Texas Central has no hope of raising the funds it would need to become an operating railroad. Based on this, it would seem unreasonable for this Court to allow Texas Central to disrupt the plans and activities of private landowners by giving the company the extraordinary power of eminent domain.

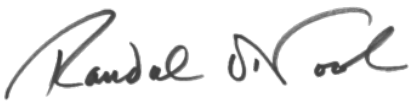
Yours truly,



Randal O'Toole

CERTIFICATE OF SERVICE

I certify that a copy of this document was served by electronic transmission on all counsel of record on September 16, 2021.



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1. *See, e.g.*, Randal O'Toole, Towards Safe, Cost-Effective, and Equitable Transportation: Reviewing and Reforming Priorities of the North Carolina Department of Transportation (Raleigh: John Locke Foundation, 2021); Randal O'Toole, Ten Fallacies of the Thrive MSP 2040 Plan (Minneapolis: Center of the American Experiment, 2017).
2. *See, e.g.*, Randal O'Toole, *The High Cost of High-Speed Rail* (Austin: Texas Public Policy Foundation, 2009); Randal O'Toole, *Review of Greenlight Pinellas* (Washington: Cato Institute, 2014).
3. Randal O'Toole, *A Tale of Three Private High-Speed Rail Plans* (Camp Sherman, OR: Thoreau Institute, 2019).
4. Andrew Tanielian, *$10 Billion Could Buy High-Speed Trains*, NBCDFW (May 12, 2012), tinyurl.com/5a4j8ht9.
5. Jason Whitely, *Building Texas Bullet Train Hinges on Congress Passing Bipartisan Infrastructure Bill, CEO Says*, WFAA (September 6, 2021), tinyurl.com/4j79vdhj.
6. Evan Hoopfer, *Texas Central's High-Speed Rail Project 'Could Require Some Stimulus Money' CEO Says*, Dallas Business Journal (June 5, 2020), tinyurl.com/yp9ke6ux.
7. California High-Speed Rail Authority, *California High-Speed Rail Business Plan* (Sacramento: California High-Speed Rail Authority, 2000), p. 2, ti.org/pdfs/CAHSRPlan2000.pdf.
8. Adam Nagourney, *The $100 Billion Train: The Future of California or a Boondoggle?*, New York Times (July 30, 2018), tinyurl.com/tn3sk2rs.
9. *See* "Before and After Studies of New Starts Projects," Federal Transit Administration, 2020, tinyurl.com/ywj5dubz, for downloadable copies of DOT reports. See Randal O'Toole, *Cost Overruns and Ridership Shortfalls* (Camp Sherman, OR: Thoreau Institute, 2021), p. 3, ti.org/pdfs/APB111.pdf for my summary of these reports.
10. *Ridership by the Millions*, Texas Central, texascentral.com/ridership/, accessed on September 16, 2021.
11. *See* "Before and After Studies of New Starts Projects" and my summary in *Cost Overruns and Ridership Shortfalls.*
12. *2009 National Transit Database* (Washington: Federal Transit Administration, 2010), Service spreadsheet, tinyurl.com/2kjejuyz
13. *2010 National Transit Database* (Washington: Federal Transit Administration, 2011), Service spreadsheet, tinyurl.com/snp3t2a3
14. *2019 National Transit Database* (Washington: Federal Transit Administration, 2020), Service spreadsheet, tinyurl.com/uu4btfdr.
15. *Monthly Performance Report: FY 2019* (Washington: Amtrak, 2019), p. 8, ti.org/pdfs/1909monthly.pdf.
16. Calculated from *Monthly Performance Report FY 2017* (Washington: Amtrak, 2017), p. 7, ti.org/pdfs/1709monthly.pdf.
17. *The Northeast Corridor Infrastructure Master Plan* (Washington: Northeast Corridor Master Plan Working Group, 2010), p. ES-7.

18. *Connect NEC 2035* (Washington: Northeast Corridor Commission, 2021), p. xiv.
19. Based on a search using Kayak.com.
20. *National Transportation Statistics* (Washington: Bureau of Transportation Statistics, 2021), table 3-20, "Average Passenger Revenue Per Passenger-Mile," tinyurl.com/wwv7fma6
21. Calculated from *Monthly Performance Report: FY 2019*, p. 3 (ticket revenues) and p. 5 (passenger-miles).
22. *Brightline Fails to Sell Private Activity Bond Deal for Las Vegas Rail*, Citizens Against the Train (November 4, 2020), tinyurl.com/c9u7y7wt.
23. Jason Whitely, *Building Texas Bullet Train Hinges on Congress Passing Bipartisan Infrastructure Bill, CEO Says*, WFAA, September 6, 2021, tinyurl.com/4j79vdhj.
24. "Railroad Rehabilitation and Improvement Financing (RRIF)," Department of Transportation, 2021, tinyurl.com/2pr44c55.