

Submitted via email to info@BWMaglev.info

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SCMAGLEV Project
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Re: Baltimore-Washington Superconducting Magnetic Levitation Draft Environmental Impact Statement and Draft Section 4(f) Evaluation

The Coalition for Smarter Growth submits the following comments in response to the Notice of Availability of the Baltimore-Washington Superconducting Magnetic Levitation (SCMAGLEV) Draft Environmental Impact Statement (DEIS) and Draft Section 4(f) Evaluation. We oppose the Baltimore-Washington SCMAGLEV (henceforth referred to as “the project”) and support the No Build alternative for reasons detailed below.

1. Extremely narrow and biased purpose and need

“To evaluate, and ultimately construct and operate, a safe, revenue-producing, high-speed ground transportation system that achieves the optimum operating speed of the SCMAGLEV technology to significantly reduce travel time to meet the capacity and ridership needs of the Baltimore-Washington region.”¹

The above purpose statement from the DEIS is extremely narrow and explicitly biased toward the Baltimore-Washington SCMAGLEV project. Rather than comprehensively study transportation options to reduce travel times, improve connectivity, and increase transit ridership between Baltimore and Washington, the DEIS only considers alternatives using SCMAGLEV technology. This approach artificially starts with the solution rather than giving a menu of options due attention. Among the alternatives that should have been studied is a combination of MARC and Amtrak improvements, along with transit-oriented station development (TOD). Given that the SCMAGLEV would have major impacts on parkland it would violate Section 4(f) of the Federal Highway Act. The MARC, Amtrak, TOD alternative along existing rail alignments is a prudent and feasible alternative to the SCMAGLEV that cannot legally be ignored.

¹ U.S. Department of Transportation Federal Railroad Administration; Maryland Department of Transportation. 2021. "Draft Environmental Impact Statement and Draft Section 4(f) Evaluation: Baltimore-Washington Superconducting Maglev Project." ES-6.

2. Lack of independent utility

Project advocates, such as Northeast Maglev, have indicated an intention and desire for the Baltimore-Washington corridor to only be the first segment of a SCMAGLEV line covering the full Northeast Corridor (NEC). Future project segments could connect as far north as Boston, Massachusetts or south to Charlotte, North Carolina. However, given the higher densities along much of the corridor and resulting right-of-way design and cost challenges, approval and ultimate construction of the full SCMAGLEV is unlikely.

There are diminishing returns on short-distance Maglev service. The Acela Express between DC and Baltimore currently takes 30 minutes. While Maglev would cut time spent on the train in half, this doesn't account for total trip time, including time spent getting to the station. The average total trip would go from 90 minutes to 75 minutes, which is not worth the risk, nor the costs to equity and environmental quality.² The 15-minute Maglev trip would only be six minutes faster than the expected Acela trip time following replacement of the B&P Tunnel and other investments that are already moving forward.³

Many of the high-speed travel benefits would only come from extending the SCMAGLEV beyond the Washington, DC and Baltimore regions. Therefore, this particular segment simply does not provide independent utility, but if built could very well become a “white elephant” — an isolated short-distance segment with few benefits beyond what could be achieved by upgrading existing technologies.

2. Negative racial and social equity impacts

The project would have a negative impact on racial and social equity. Construction would plow through majority-Black Prince George's County, but the residents of Prince George's County would not be able to take advantage of the project, since there will only be stops in DC, at BWI Airport, and at Penn Station in Baltimore. Environmental Justice (EJ) communities would be disproportionately impacted, with 80 percent of impacted parcels located in EJ communities, and vent systems and viaduct/viaduct ramps located completely in EJ communities.⁴

Furthermore, the high projected cost of a one-way ticket sends a signal that this project is for the wealthiest white-collar commuters, not those who will suffer from the environmental

² Levy, Alon. 2018. *Is maglev right for D.C.?* March 22.

<https://www.dcpolicycenter.org/publications/is-maglev-right-for-d-c/>.

³ Flynn, William J. 2021. "Testimony of William J. Flynn, Chief Executive Officer, National Railroad Passenger Corporation Before the United States Houses of Representatives House Committee on Transportation & Infrastructure Subcommittee on Railroads, Pipelines, and Hazardous Materials, When Unlimited Potential Meets Limited Resources: The Benefits and Challenges of High-Speed Rail and Emerging Rail Technologies" May 6. <https://transportation.house.gov/imo/media/doc/Flynn%20Testimony2.pdf>.

⁴ Ibid, 4.5-16, 4.5-20.

destruction wrought by the project or those who need more accessible, frequent, and affordable transit. An average \$60 ticket for the Baltimore-Washington SCMAGLEV would be about seven times more than an existing MARC ticket for the same trip (\$8), four times more than an Amtrak NE Regional coach ticket (\$15), and 30% more than an existing Amtrak Acela ticket (\$46).⁵

3. Harm to taxpayer investments in existing transit

The Baltimore-Washington SCMAGLEV is already diverting millions of dollars and attention from repairing and improving our existing MARC and Amtrak infrastructure, and could divert billions more. The Federal Railroad Administration (FRA) has already awarded a \$27.8 million grant to MDOT MTA for preliminary engineering and environmental review.⁶ Given that Maglev is a multi-billion dollar technology yet to be implemented anywhere in the U.S., it could require significant public funding. The DEIS says repeatedly that the project might receive federal funding.⁷ We believe that there is a real likelihood that the proponents will seek substantial public funding. At a recent hearing before the United States House of Representatives' Committee on Transportation & Infrastructure Subcommittee on Railroads, Pipelines, and Hazardous Materials, BRWW explicitly asked for \$300 million in contract authority.⁸ This indicates an intention to continue to seek ever-greater federal and state taxpayer dollars for this project.

In addition to diverting federal funding, the project would negatively impact ridership on existing MARC and Amtrak rail systems. As the DEIS states, "the large majority of forecasted trips on SCMAGLEV Project are diverted from other modes rather than induced new trips."⁹ The DEIS shows the project diverting 32 percent of MARC riders from MARC and 94 percent of annual Amtrak riders between Penn Station and Union Station.¹⁰ This substantial decrease in ridership on both systems would be accompanied by a substantial decrease in Amtrak and MARC fare revenue, potentially leading to poorer service for those unable to afford the ticket cost of the Baltimore-Washington SCMAGLEV. This disparity would further entrench transportation inequities.

⁵ Ibid, 4.6-13.

⁶ Ibid, ES-1.

⁷ Ibid, 4.4-4, 4.4-20, 4.6-9, and 4.21-6.

⁸ Rogers, Wayne L. 2021. "Testimony of Wayne L. Rogers, Chairman & CEO The Northeast Maglev, LLC before the United States Houses of Representatives House Committee on Transportation & Infrastructure Subcommittee on Railroads, Pipelines, and Hazardous Materials, When Unlimited Potential Meets Limited Resources: The Benefits and Challenges of High-Speed Rail and Emerging Rail Technologies" May 6.
<https://transportation.house.gov/imo/media/doc/Rogers%20Testimony.pdf>.

⁹ Ibid, 4.2-6.

¹⁰ Ibid, 4.2-10 and 4.2-12.

Investing in the MARC and Amtrak Northeast Corridor (NEC) expansion plans would more effectively serve the transit needs of our region. In fact, Amtrak and the Federal Railroad Administration already analyzed “the mobility challenges of the Baltimore-Washington, DC travel corridor with a focus on the role of passenger rail in meeting those challenges” and determined that a new passenger rail alignment was not necessary, as a part of the NEC FUTURE program.¹¹ Instead, their programmatic environmental impact statement (EIS) identified improvement of the existing rail alignment as the preferred alternative.

For \$6.8 billion, the region could fund the entire program of improvements in the Greater Washington Partnership Capital Region Rail Vision for the DC to Baltimore travel corridor, with tangible benefits to residents and travelers throughout Prince George’s County, Howard County, Anne Arundel County, the City of Baltimore, and the District of Columbia, compared to the \$10-\$15 billion cost of the SCMAGLEV project.¹² For the Penn and Camden MARC lines, this would provide:

- Faster, more reliable travel times
- Improved stations and amenities
- Seamless rail integration from Baltimore to DC, and set the stage for integration via through-running service into Northern Virginia
- Facilities to support all-day, frequent service, enabling the system to serve more than weekday, 9-5 commuters

¹¹ Campbell-Lorenc, AICP, Janet. Letter to Mr. Bradley M. Smith, Director of the Office of Freight and Multimodalism, Maryland Department of Transportation. Amtrak, Corporate Planning. January 31, 2017.

¹² Greater Washington Partnership. 2020. *Capital Region Rail Vision: From Baltimore to Richmond, Creating a More Unified, Competitive, Modern Rail Network*. December.
https://greaterwashingtonpartnership.com/wp-content/uploads/2020/12/Capital-Region-Rail-Vision-Report_Final.pdf.

Wash-Balt. Corridor Improvements in Capital Region Rail Vision	
Penn Line Improvements	Millions \$
3-main tracks, New York Ave to New Carrollton	271
Additional 4th track, New Carrollton to Grove	584
B&P Tunnel replacement —4 tubes	4,520
Baltimore Penn Station interlocking improvements	67
Union Tunnel expansion— additional 4th track	151
Bayview track realignment	15
Station modifications to support one additional main track: Odenton, Bowie State, Seabrook, New Carrollton	90
New Carrollton Station -- 4th track with platform	53
Baltimore Penn Station improvements	140
New Bayview Station	100
Overnight Storage Facility	40
Penn Line Storage and Maintenance Facility	294
Subtotal	6,325
Camden Line Improvements	Millions \$
Montana siding extension	12
Third track: Brentwood- Hyattsville	31
Third track: Hyattsville-Greenbelt	23
Third track, Savage-Jessup	22
Double-tracking: Alexandria Branch across Anacostia River	11
Additional 3rd track	200
Signal system improvements	22
Station upgrades	54
Station parking and access improvements	105
Camden Line storage and maintenance facility improvements	37
Subtotal	517
Total (millions \$)	6,842
Washington Union Station Near-Term Improvements and Full Expansion	
Washington Union Station Near-Term VRE Improvements	55
Washington Union Station Full Expansion	5,560
Total (millions \$)	5,615

The investments needed to provide higher quality Amtrak NEC service are already underway, such as the replacement of the Baltimore & Potomac Tunnels, additional right-of-way and track segments, and modernization and expansion of Washington Union Station.¹³ “Amtrak has taken out a \$2.5 billion loan with the Federal Railroad Administration to purchase new high speed trains and construct infrastructure needed to optimize high speed rail service between Baltimore and Washington, DC.”¹⁴ Any public or private dollars spent on SCMAGLEV would undercut these existing taxpayer investments in the Amtrak NEC.

¹³ Campbell-Lorenc, AICP, Janet. Letter to Mr. Bradley M. Smith, Director of the Office of Freight and Multimodalism, Maryland Department of Transportation. Amtrak, Corporate Planning. January 31, 2017.

¹⁴ Ibid.

There are also many questions about how the project's DC station would impact the District and whether it would benefit or harm the city's transportation network. It is unclear how the currently proposed station location in Mount Vernon East would impact New York Avenue, a major transportation corridor, and the District's goals to minimize parking and single-occupancy vehicle trips. BWRR plans to add 1,000 underground parking spaces which would induce more traffic on DC streets. Additionally, the proposed Mount Vernon East Station would offer no direct underground connections to Metrorail, leaving Maglev riders disconnected from the District's subway system and from the Amtrak hub at Union Station when disembarking. This contradicts one of the project's stated objectives: "Connectivity to existing transportation modes in the region." Other alternatives to Mount Vernon East were eliminated, so it is impossible to fully evaluate the relative costs and benefits of those options.

Upgrades to the existing rail system could also more easily be extended to other destinations in the northeast than the SCMAGLEV. Existing rail stations are located in more central and well-established transit hubs, like DC's Union Station. In short, a much more cost-effective solution would be to invest in improving our existing infrastructure and eventually upgrade to high-speed rail standards.

4. Questions about ridership estimates

Our arguments so far assume that the project's ridership estimates included in the DEIS are correct. However, this may not be the case. The ridership forecast copies from a contractor's report, which is not available to the public to review without heavy redactions. Furthermore, the "ridership demand forecasts were developed by the Project Sponsor" and it does not seem that they were reviewed independently by the Federal Railroad Administration or any other federal agencies.¹⁵ Analysis from a private citizen finds that "the official forecast is approximately one hundred times greater than the independent, unofficial forecast."¹⁶ A faulty ridership forecast calls into question the purported benefits of the project.

5. Existing alternatives avoid negative environmental impacts

Creating a new right of way for this project, rather than investing in existing rail right of way, will bring about numerous negative environmental impacts, as documented in the DEIS. Not only does the project require above-ground viaducts for 14 to 25 percent of the route, with a

¹⁵ U.S. Department of Transportation Federal Railroad Administration; Maryland Department of Transportation. 2021. "Draft Environmental Impact Statement and Draft Section 4(f) Evaluation: Baltimore-Washington Superconducting Maglev Project, Appendix D.2 Transportation Technical Report." B-104. <https://www.bwmaglev.info/index.php/component/jdownloads/?task=download.send&id=38&catid=4&m=0&Itemid=101>.

¹⁶ Kelley, Owen A. 2021. *The Federal Railroad Administration falls for an excessively high forecast of how many trips would be made on the maglev*. May 21. <https://www.greenbeltonline.org/maglev-ridership/>.

right-of-way of 72 feet or more, but the project also requires a Trainset Maintenance Facility, nine Fresh Air/Emergency Egress buildings, two maintenance of way facilities, seven power substations, an operations and control center, small support buildings, access roads, parking lots, and “lay-down” lots for storage, maintenance, and staging.

These assorted facilities will negatively impact up to 328 acres of federal lands, such as the Patuxent Research Refuge, Beltsville Agricultural Research Center, and federal parklands along the Baltimore-Washington Parkway. The impacted areas include some of the last large blocks of undeveloped land in the region, serving as an important area for biodiversity, rare ecosystems, and flora and fauna. We have also signed onto comments submitted by the National Parks Conservation Association that further detail the environmental concerns.

Additionally, the Baltimore-Washington SCMAGLEV will require twice the energy per passenger mile as Amtrak, increasing energy usage by approximately 3.0 trillion additional BTUs per year — enough energy to power around 88,900 homes per year.¹⁷ It is not ensured that this electricity will come from clean, renewable sources, and the reductions in trips on other modes will not offset this increase in energy consumption. Overall, the project could lead to increased net carbon emissions by 286 to 336 million kilograms per year, further deteriorating air and water quality.¹⁸ Bus and current passenger rail technologies are 20 to 37 percent more efficient than the proposed project.¹⁹

Conclusion

In closing, the Baltimore-Washington SCMAGLEV project provides more harm than benefit. The project’s harms include its fundamental inequity and disproportionate impacts to low-income communities and communities of color, detrimental effects to ridership and funding for existing MARC and Amtrak systems, and irreversible damage to key environmental resources. These costs would be incurred without significant overall travel time savings for those who could afford to ride Maglev. The Coalition for Smarter Growth wholly endorses the No Build alternative and supports regional efforts to implement proposed MARC and Amtrak improvements.

¹⁷U.S. Department of Transportation Federal Railroad Administration; Maryland Department of Transportation. 2021. "Draft Environmental Impact Statement and Draft Section 4(f) Evaluation: Baltimore-Washington Superconducting Maglev Project." 4.19-7.

¹⁸ Kelley, Owen A. 2021. *Operating the maglev would increase greenhouse gas emissions, Federal Railroad Administration finds*. April 13. <https://www.greenbeltonline.org/operating-the-maglev-would-increase-greenhouse-gas-emissions-federal-railroad-administration-finds/>.

¹⁹ U.S. Department of Transportation Federal Railroad Administration; Maryland Department of Transportation. 2021. "Draft Environmental Impact Statement and Draft Section 4(f) Evaluation: Baltimore-Washington Superconducting Maglev Project." 4.19-10.