Testimony for SB0188 per Susan Barnett.pdf
Uploaded by: Barnett, Susan
Position: FAV

To the Honorable Chair Guzzone and all members of the Budget and Taxation Committee:

I am writing in favor of SB0188 for the following reasons.

1. The State is correct in protecting its funds and reserving them for necessary future transportation and infrastructure needs.

- Given that the Maglev is projected to cost at least 16-20 billion dollars (and likely more) the state will not be able to cover such an expense and still maintain the essential maintenance and upgrades of transportation and infrastructure projects throughout its districts.
- Given that the Maglev is considered a "luxury" transit option it makes sense that no state funding be allocated for the high ticket priced and limited service this project will provide if it is ever completed.

2. The projected Climate Crisis, which is now 8-9 years away, is likely to change the scenarios under which we work, travel, and live significantly. We need to be attending ever more closely to the footprint of projects undertaken or funded by the state.

- Based on recent research, the construction of the SCMaglev will generate more greenhouse gases than it will save for likely several decades. We do not have decades to wait for such a "possibility". In addition, the project will destroy hundreds of acres of wild green spaces including a forest preserve, wetlands and wildlife refuge all of which are needed for CO2 storage, clean air and water, and climate cooling.

- Given that there has not been an analysis made of how we will need to adapt to climate change within the next decade alone, protecting the state from losing funding for needed transportation and infrastructure projects throughout the state makes complete sense.

3. The current pandemic has created an economic crisis and we do not yet know what the endpoint of this will be. In addition, the pandemic has demonstrated the resourcefulness of our various institutions. Traditional practices for every type of organization, business, school, etc., have been challenged and shifted dramatically. Just as with this meeting of the Taxation and Budget Committee, we have found that we no longer need or must travel (in cars or on transit systems) to attend a meeting or to collect in ways previously thought to be necessary.

- Virtual meetings will likely replace many of the previously used in-person meetings. This will change the need for travel. The SCMaglev has not considered this change in its ridership projections. This factor will alter the future of all transit systems. Indeed, most transit systems are struggling to maintain basic service right now.

- The SCMaglev is considered a luxury service and as such will be in less demand given this shift away from in-person meetings. As such it is not deserving of state funding.

Thank you for your consideration of these points. In light of these crucial issues I believe the state is correct to protect its transportation and infrastructure funding for necessary (not luxury) projects of the future.

Sincerely,

Susan Barnett
12 Plateau Place, Unit H
Greenbelt, MD 20770

_2SB0188_HB0063 State Finance-Prohibited Appropri

Uploaded by: Fine, Maureen

Position: FAV

Support SB0188/HB0063 sponsored by Sen. Pinsky
State Finance-Prohibited Appropriations-Magnetic Levitation Train Systems
Committee: Budget and Taxation, and Education, Health, and Environmental Affairs

Dear Senators, Jan. 25, 2021

I ask you, as a Master Naturalist, a birder, a steward of Maryland's natural areas, and as a grandmother, to prohibit any funding for the Magnetic Levitation Train. Among a growing list of negative impacts of this disastrous project, it would destroy 200 acres, and degrade the entirety, of public lands within the Patuxent Wildlife Research Refuge and the Beltsville Agricultural Research Center. Now more than ever, in the midst of a Climate Crisis, and facing a looming Sixth Great Extinction of Biodiversity, we must steadfastly protect Maryland's natural treasures.

Scientists come from throughout the world to do research at PWRR/BARC---the largest federal wildlife and agriculture research center in the U.S. We are so fortunate to have it here in Maryland, and it is sickening that BWRR proposes it as an industrial site to wash, store, repair, and manufacture trains. **Please do not ever fund a project that will "take" public land for a private corporation with deep pockets and top lobbyists who wield disproportionate power in Annapolis!**

Please support SB0188/HB0063.

Thank you,
Maureen Fine
2509 Knighthill Lane
Bowie, MD 20715
301-464-9306

Maglev SB 188 comments_FINAL.pdf
Uploaded by: Hart, Kyle
Position: FAV

Comments to Maryland Senate Finance Committee

Submitted on 1/25/2021, for the committee hearing on 1/27/2021

In support of SB 188, State Finance – Prohibited Appropriations – Magnetic Levitation Transportation System

My name is Kyle Hart, and I am the Mid-Atlantic Field Representative of the National Parks Conservation Association (NPCA). These comments are submitted today on behalf of NPCA and our 28,398 members and supporters in Maryland. Today we are submitting comments in support of SB 188, Senator Paul Pinsky's bill banning state appropriations from being used for a Maglev project.

The National Parks Conservation Association is the only national membership organization dedicated to advocacy of behalf of our country's national parks. NPCA's mission is to protect and enhance America's National Park System for present and future generations, a mission we have upheld since NPCA was created by the very first National Park Service Director Stephen Mather in 1919. Maryland is fortunate to be home to 18 national park sites, visited yearly by almost 7 million people and contributing to over $300 million in economic benefit to the state.

The concept for Magnetic Levitation Trains is a mostly untested and unproven concept as a commuting system. It has been tested in several counties, notably Japan and China, but remains predominately a tourist attraction and not a proven transportation system. Projects for this technology consistently run over budget and over schedule.

As many of you likely know, a Draft Environmental Impact Statement (DEIS) for a Maglev train running from Baltimore to Washington D.C. was released last week. The release of this DEIS is the first true attempt to bring this technology to America. However, the DEIS highlights an expensive project with near-certain ridership concerns. The DEIS estimates the project will cost $12 billion dollars and predicts tickets will cost 7 times as much as the MARC train. A one-way MARC ticket from Baltimore to DC is $8, making the price of a Maglev one-way ticket $56. Ridership for Amtrak, MARC, and the DC metro have declined significantly since the beginning of the coronavirus pandemic. The DEIS also acknowledges that there is "not yet a consensus regarding the long-term impacts" of coronavirus on ridership for transit systems. Thus, it is likely that this project would eventually run into funding concerns.

As currently outlined in the DEIS, this project would bring tremendous harm to parks and local communities throughout the proposed route. While we have not fully reviewed the DEIS, initial readings show that all alternatives would impact National Park Service property, US Fish and Wildlife Service property, and US Department of Agriculture property. Elevated train lines, supported by viaducts, would run alongside the historic Baltimore-Washington Parkway which is listed on the National Register of Historic Places, replacing wooded open space with concrete. In addition to the Parkway, Greenbelt Park would lose valuable green space to the Maglev, harming outdoor recreation and important wildlife corridors in an urban setting. Many build alternatives would have forest impacts on Greenbelt Forest Preserve, eliminating much of the buffer between residential areas and the BW Parkway, resulting in runoff that would pollute our rivers and streams. Placement of venting stations, stormwater management systems, and other proposed needs for this project are not clearly delineated in the DEIS, making assessment of impacts impossible.

Finally, the Maglev proposal would disproportionally harm Maryland residents of Prince George's County while not giving them any benefit as the current plan does not give communities along the route any access to the train. Marylanders should not bear the brunt of this expensive experimental project. Senator Pinsky's bill would be a great first step in ensuring that Maryland residents do not get stuck footing the bill for this disastrous boondoggle. Thank you for the opportunity to comment today.

Mayor Takisha James Testimony_SB0188.pdf
Uploaded by: James, Takisha
Position: FAV

Town of Bladensburg

January 25, 2021

Honorable Senator Guy Guzzone
Chairman, Maryland State Senate, Budget & Taxation Committee
3 West
Miller Senate Office Building
Annapolis, MD 21401

Dear Chairman Guzzone, Vice Chair Rosapepe, and Members of the Budget and Taxation Committee:

Thank you for the opportunity to submit testimony in favor of SB0188, entitled State Finance – Prohibited Appropriations – Magnetic Levitation Transportation System, which is also cross filed in the House as HB0063 with the same title.

As elected officials, we have a responsibility to protect our residents (and their residences), schools, places of worship, businesses, national park land and waterfront parks, federally owned property and vital federal government agencies located within our municipalities. All these important assets as well as the delicate ecosystems found in our communities must be protected against projects that ignore their importance to the prosperity and quality of life of Maryland residents.

The proposed SCMaglev train project places all of these assets in jeopardy and also puts taxpayers at risk of being financially responsible for the project should it prove economically unviable for the developer. For the sake of comparison, the California bullet train began with an estimated cost of $6 billion, but by 2020 costs were projected to be $80.3 billion. The SCMaglev is following the same trend, such that if the developer is unable to secure the necessary funding to bridge the financial gap, taxpayers could be held responsible for subsidizing it. In addition, of particular concern is the financial uncertainty this project inherently brings to bear. It is not recession-proof. An economic downturn such as what we experienced in the Great Recession of 2008 or the recent COVID-19 pandemic, which has resulted in significant financial devastation and job loss to many across this great state, could jeopardize the developers' ability to finish the project. Northeast Maglev cannot guarantee this project is recession-proof and would be able to survive these kinds of extenuating circumstances, which could occur at any time without warning.

SB0188 would serve the residents of the Town of Bladensburg, Prince George's County, and the entire state of Maryland by ensuring taxpayers do not end up being on the hook for this expensive and sure-to-be overrun project should the developer decide to walk away from it or be unable to fully fund it. Should this project move forward, it is critical that all Marylanders are protected from the responsibility of bailing it out should it prove to be an unsuccessful privately-funded project.

I applaud Senator Pinsky for gathering input from communities that would be affected by this train and for being responsive to our concerns by seeking to take action with SB0188. This proposed legislation will provide much-needed protection for taxpayers to ensure we Marylanders are not left holding the bag for this lofty project.

Thank you.

Sincerely,

Takisha D. James
Mayor, Town of Bladensburg

Testimony SB-188 Maglev 2021- B&T.pdf
Uploaded by: Kasecamp, Larry
Position: FAV

LARRY KASECAMP
Legislative Director

THOMAS CAHILL
Assistant Director

JOHNNY WALKER
Secretary

MARYLAND STATE LEGISLATIVE BOARD
SHEET METAL | AIR | RAIL | TRANSPORTATION
SMART
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ANNAPOLIS OFFICE
176 Conduit St., Suite 206
Annapolis, MD 21401-2597

January 25, 2021

The Honorable Paul Pinsky, Chairman
Members of the Senate Budget and Taxation Committee

RE: Support SB-188

As the Maryland Legislative Director for the Transportation Division of the International Association of Sheet Metal, Air, Rail and Transportation Worker's (SMART) and on behalf of our members I urge support for SB-188.

We are the largest rail labor union in North America. Our members in Maryland are employees of CSX, Norfolk Southern Railway, Amtrak, Bombardier (MARC Service) and the Canton Railroad and work as conductors, engineers, switchmen, trainmen, utility persons and yardmasters. Our members operate freight and passenger trains that travel throughout the State of Maryland and throughout the entire Northeast Rail Corridor. SMART represents over 216,000 members throughout the country.

SB-188 would prohibit the State and certain units and instrumentalities of the State from using any appropriation for a magnetic levitation transportation system in the State. This is in line with our position opposing construction of any magnetic levitation system that would require local or state jurisdictions to contribute property or tax dollars for such a system.

Our current Amtrak and MARC rail systems, which by the way can meet the needs of rail travel between Washington and Baltimore, are in great need of investment to maintain and modernize their systems. It makes no sense to divert much-needed dollars to a new system with cost estimates from $10 billion to as high as $26.5 billion. Especially to a system that would only decrease travel time between these cities by approximately 15 minutes and undoubtedly mostly be used by residents in the upper income brackets.

At a time when income inequality as a result of the disparity in opportunities is so obvious, we don't need to exacerbate this problem by investing in an ultra-expensive unnecessary system. Maglev is to rail travel what the Concorde was to air travel, and we know how that ended. We don't want the same to happen and the State be left holding the bag.

Thank you for your time and consideration of our position on this matter.

Sincerely,

Larry

Lawrence E. Kasecamp
MD State Legislative Director
SMART Transportation Division

McCutchen Maglev SB0188 Written Testimony 1-27-202
Uploaded by: McCutchen, Susan
Position: FAV

January 27, 2021

Written Testimony in Support of SB0188 – State Finance – Prohibited Appropriations – Magnetic Levitation – Transportation System

Chairman Guzzone, Vice Chair Rosapepe, and Members of the Budget and Taxation Committee,

My name is Susan McCutchen. I am writing in support of SB0188, sponsored by Senator Paul Pinsky. I want to thank him for bringing forth this bill that would prohibit Baltimore-Washington Rapid Rail (BWRR) from appropriating funds from the state of Maryland to build the SCMaglev train transportation system, except for expenditures for "the salaries of personnel assigned to review permits or other forms of approval" for such a system.

As I recall, this exception is responsive to the concerns expressed by the Northeast Maglev that a previous iteration of this bill had unintended consequences in that it would inadvertently tie their hands to work with the appropriate state personnel to acquire permits or other required approvals should the project go forward. By including this caveat, the bill should now be acceptable to the BWRR and Northeast Maglev, as they repeatedly state they are a private company and will not need to seek state funds.

In thinking about the possible construction of the SCMaglev transportation system, I am reminded of the work stoppage and cost overruns of the Purple Line, as well as the troubling saga of the California bullet train project as their construction and financial woes continue to mount, including significant delays in paying property owners from whom the developers purchased land. I acknowledge that the Purple Line and the California High-Speed Rail project are public-private partnerships. This contrasts with the set-up of the private SCMaglev project. Undoubtedly, however, this project will face financial difficulties as the projected costs increase exponentially and the actual work is undertaken. As a result, the ability of BWRR to either continue or complete the project will be curtailed. BWRR and its partners will seek additional funds from bank loans as well as from the Maryland and federal government. Government funds are taxpayer dollars. We the people will pay—and already have from a chunk of federal government funds allocated to undertake the study and meet NEPA requirements.

The Japanese government intends to invest in the SCMaglev project, thereby becoming a BWRR partner. They will own an as-yet undetermined percentage of this project. Their technology and expertise will anchor the construction and operation of the SCMaglev. They will seek a profit above all no matter how many fees Japan waives for BWRR to acquire the technology. I do not relish the Japanese owning a piece of Maryland's Northeast Corridor and demanding repayment should the project falter or perhaps not be able to be finished. They and all interested parties will no doubt expect to be repaid for their investments in building and operating the train. Again, we the people will pay to complete a foundering project.

Thank you for this opportunity to provide written testimony. I look forward to SB0188 moving out of committee and going forward.

Sincerely,

Susan R. McCutchen

Susan R. McCutchen
5404 Spring Road
Bladensburg, Maryland

Glaros re MAGLEV Leg.pdf
Uploaded by: Pinsky, Paul
Position: FAV

PRINCE GEORGE'S | COUNTY COUNCIL

Dannielle M. Glaros
Council Member
Council District 3
(301) 952-3060

Together Strengthening Our Community

January 25, 2021

Senator Delores G. Kelley, *Chair*
Senator Brian J. Feldman, *Vice-Chair*
Senate Finance Committee
VIA Email

Re: SB0188 [*Cross-filed with HB0063*] State Finance – Prohibited Appropriations – Magnetic Levitation Transportation System, Sponsored by Sen. Paul Pinsky

Dear Chair Kelley, Vice Chair Feldman, and Members of the Senate Finance Committee:

I am writing today in support of SB0188, prohibiting the State and certain units and instrumentalities of the State from using any appropriation for a magnetic levitation transportation system in the State; and providing that the prohibition does not apply to certain expenditures for salaries.

From the moment the Maglev project was first announced, I knew that any route chosen would need to come through Prince George's County Councilmanic District 3, which I am honored to represent. Consequently, I have followed this project and weighed in with my strong concerns and deep skepticism from the beginning. As a longtime transit advocate, I know this project also missed a key ingredient of good transit—improved equity and access.

The current alignment would travel under residences as well as schools in my district including the communities of New Carrollton, Martin's Wood, Beacon Heights, and Woodlawn/Glenridge. For those who are unfamiliar with this part of the county, the average income is roughly $15-20,000 below the county average and, like most of the county, is a predominately Black and Brown community. The ventilation and effects of tunneling below homes and schools are only now becoming known to the community (minimal outreach has occurred). Simply ask yourself, would you want this new tunnel and its ventilation demands in your neighborhood or under your home? Like me, you would likely say no or have deep reservations.

Couple these concerns with the reality that this proposal creates no long-term benefit for our residents when the closest access—in DC or at BWI—will be 30 minutes away on average. The suggested cost for a trip from DC to Baltimore has always been Acela prices—too much for many. Maglev simply fails to improve access and equity for Prince George's County. With limited transportation resources, it is essential that the State prioritize projects that will truly

Website: pgccouncil.us/district3 | County Administration Building
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: @GlarosCouncil3 | Upper Marlboro, Maryland 20772

PRINCE GEORGE'S | COUNTY COUNCIL

Dannielle M. Glaros
Council Member
Council District 3
(301) 952-3060

Together Strengthening Our Community

grow the state and local economies and provide the greatest benefits to our residents. Please support SB0188 and take actions to address this poorly conceived project.

Thank you for your consideration. If you have any questions, please reach out to me directly at DMGlaros@co.pg.md.us or on my cell at 240-416-5803.

Together Strengthening Our Community,

Dannielle M. Glaros

Website: pgccouncil.us/district3
f: Facebook.com/PGDistrict3
: @GlarosCouncil3
County Administration Building
14741 Governor Oden Bowie Drive, 2nd Floor
Upper Marlboro, Maryland 20772

SB188 - Prohibited Appropriations-Magnetic Levitat

Uploaded by: Tulkin, Josh

Position: FAV

7338 Baltimore Ave
Suite 102
College Park, MD 20740

Committee: Budget and Taxation

Testimony on: SB188 - "State Finance – Prohibited Appropriations – Magnetic Levitation Transportation System"

Position: Support

Hearing Date: January 27, 2021

The Maryland Chapter of the Sierra Club supports SB188 that would prohibit the State and any unit or instrumentality of the State from using any appropriation for a magnetic levitation transportation system (Maglev) in the state. The prohibition would not apply to expenditures for the salaries of personnel assigned to review permits or other forms of approval for a magnetic levitation transportation system.

We strongly support state funding for reliable and affordable public transit for working Marylanders and oppose any state funding for an expensive private transportation project. The state is already spending its limited resources to complete the Purple Line and is underfunding critical transportation infrastructure such as that provided by the Maryland Transit Administration. MTA has a deferred maintenance backlog of $1.5 billion and also lacks funding for needed compliance projects and other upgrades.

We also have major concerns about the many environmental and social justice impacts of Maglev in Maryland. It would destroy hundreds of acres of the most ecologically important research, conservation and forest areas in the MidAtlantic area, and impact three rivers that feed into the Chesapeake Bay. It also would negatively affect environmental justice areas along the length of the Maglev project corridor in Maryland, and not be affordable for low and moderate income residents. In addition, we are concerned that Maglev ridership studies show a large portion of its riders would come from MARC, Amtrak and Acela, thereby endangering the viability of those important train systems in the region.

Maglev proponents say the project would not need any money from the state. SB188 would merely put that statement into statute.

Experience shows that having Maryland officials make statements regarding transportation (such as, "No state money will go to Maglev") are not commitments to be trusted. The Governor said the replacement for the Governor Harry W. Nice Memorial Bridge in Newburg would contain a barrier-separated path for hikers and cyclists, but then the state changed its plan. The Governor and Secretary of the Maryland Department of Transportation said repeatedly that state funds would not be used to fund the Managed Lanes project on I-495 and I-270, but project documents subsequently showed that not to be true. So, this bill is necessary to ensure no financial appropriation from the state can be used for Maglev.

In summary, this bill contains a reasonable prohibition on how the state's money may be spent, and we urge this committee to issue a favorable report on it.

Brian E. Ditzler
Transportation Chair
Brian.Ditzler@MDSierra.org

Josh Tulkin
Chapter Director
Josh.Tulkin@MDSierra.org

20210127_Annapolis_Support_SB188_Woomer.pdf
Uploaded by: Woomer, Dan
Position: FAV

Title: **MCRT & CATS Supports Maryland General Assembly Senate Bill 188**

Speaker: Daniel E. Woomer
Maryland Coalition for Responsible Transit (MCRT)
Citizens Against the SCMagLev (CATS)

Hearing: Senate Budget and Taxation Committee
West Miller Senate Building
11 Bladen Street - Room 3
Annapolis, Maryland 21401

Date: Wednesday, January 27, 2021

Time: 1:00pm

Summary:

The Citizens Against the SCMagLev (CATS) and Maryland Coalition for Responsible Transit (MCRT) join with Senator Pinsky to support this session's Senate Bill 188 – "prohibiting the State and certain units and instrumentalities of the State from using any appropriation for a magnetic levitation transportation system in the State . . . ." Building the SCMagLev train will destroy some of the last protected green areas on the east coast and bring unrepairable environmental harm to surrounding areas, potentially threatening the health of our residents, and likely require government subsidies to build, maintain, and operate the system. These funds would be better spent on high-priority infrastructure projects that benefit all Maryland's residents, not just the wealthy who can afford the cost to ride the train. While CATS and MCRT oppose the building of the SCMagLev, we strongly support the continued enhancements of existing transportation systems that benefit all Marylanders.

Testimony:

Good afternoon. My name is Daniel E. Woomer, I am a member of both the CATS and MCRT, and I am pleased to speak with you today in support of SB 188.

There are many reasons the CATS and MCRT are opposed to building the SCMagLev:

(1) The train will not serve all Marylanders, yet it will destroy our communities and green spaces and its emissions will damage human health.
(2) There are unanswered questions about the actual safety of the train itself.
(3) It will generate insufficient revenue requiring government subsidies.
(4) It will follow previous world experiences with such systems, many of which have failed or are being maintained with large government subsidies.
(5) The TNEM and BWRR have made many claims about jobs and revenues but have yet to share with the public their analyses supporting these claims.
(6) The need for far more high-value transportation infrastructure improvements outweigh wasting funds on building the SCMagLev.

(1) SCMagLev Does Not Serve Marylanders, Yet Destroys Our Communities and Green Spaces.

The SCMagLev project will result in:

- The destruction of swaths of homes, businesses, historic sights, and greenspaces through Prince George's County with the erection of the elevated sections of the SCMagLev.
- The destruction and/or disruption of the U.S. Department of Agriculture's Beltsville Agricultural Research Center (BARC), NASA's Optic Research Center, and the Patuxent Research Reserve (PRR), as well as the pollution of the local streams, wetlands, and the Patuxent River.
- The potential disruption of the Anne Arundel County aquifer.
- The potential release of toxins, carcinogens, and radon gas collected in the SCMagLev tunneled sections into our communities through their surface ventilation facilities.
- Concerns about our schools' structures, personnel, and students associated with the impact of a high-speed, oscillating magnetic field train running under them.
- Increased traffic with SCMagLev facilities and track maintenance equipment on I-95 and the BWI Parkway.
- With only one stop in Anne Arundel County and no stops in Prince George's County, virtually no benefit to the residents and businesses in our counties, yet the burden of the destruction.

(2) There Are Unanswered Questions About the Actual Safety of the Train Itself.

- Past proposals to build maglev systems in Florida, Pennsylvania, and Maryland using the German system were not approved for good reason.
- Despite certification by the German government that their maglev system was safe, on September 22, 2006, 70 percent of the passengers were killed and the rest injured in a maglev accident in Lathen, Germany.
- The Japanese government seeks to assure us of the safety of their SCMagLev, despite the fact that the number of passengers carried to date on their test track is only half the typical number carried by the Washington Metro (pre-COVID-19) in a single day. *Note*: Japanese success with their wheel-rail trains does not automatically transfer to maglev technology.
- Justifications for the ongoing building of their SCMagLev are being questioned in Japan. The planned 2027 date for starting the first operation of the Tokyo to Nagoya line is unlikely to be met. This would make the United States the first place where the safety of SCMagLev technology would be tested in high-frequency commercial operation.
- The Japanese SCMagLev has many unresolved safety issues that need to be addressed. Safety Rules of Particular Applicability (RPA) need to be developed by the Federal Railroad Administration before the project is authorized.
- The crashworthiness of the vehicles must be assessed for the safety of the passengers if something goes wrong. The SCMagLev should not evade the safety rules now required for Amtrak. Promoters of the SCMagLev argue that the computer systems will prevent a crash, but so did the German government before 70 percent of passengers that fateful day were killed in the Lathen maglev accident.

- The risk of the levitated SCMagLev train rising out of the guideway must be evaluated. What would happen should the train hit a small object that momentarily lifts the front end while travelling at over 300 miles-per-hour? Currently there are no physical restraints to prevent the train from rising out of the guideway.
- Below 93 miles per hour, the train will ride on retractable rubber tires. This raises many safety issues. If there is a power interruption, the rubber wheels may need to immediately support the train travelling at over 300 miles-per-hour before it comes to a stop.
- The dangers from the electromagnetic radiation need to be addressed. The Baltimore-Washington Rapid Rail (BWRR) *Alternatives Report* (November 2018) stated that people underneath the guideway " . . . need to maintain a minimum distance of 20 feet below the magnets . . . ."

(3) SCMagLev Will Generate Insufficient Revenue Requiring Government Subsidies.

Having followed the SCMagLev project for several years, it is still difficult to see how this system will generate the revenues needed to operate and maintain itself without the need for government subsidies. We all have received mixed signals for the Northeast Maglev (TNEM) and BWRR leadership, at one time stating that all the funds needed for maintenance and operation (M&O) will be generated by ridership, and at another that any system like the one proposed requires private and public support, as in the use of tax dollars to provide financial support.

To date, no major public rail system in the world operates without government subsidy. Amtrak is one of the best, generating revenues that cover the majority of its annual M&O costs, and has shown improvement over the past decade, requiring a smaller percentage of M&O to be subsidized. While Amtrak openly provides its cost versus revenue analyses and projections, we have yet to see them from the TNEM and BWRR to justify their revenue statements. One of the primary analyses as part of the $27 million federal grant to study the feasibility of the system (a requirement for any business) is to determine if sufficient revenues can be generated to cover the M&O costs. Since the majority (approximately 80 percent) of the research to produce the Draft Environmental Impact Statement (DEIS) was funded by tax dollars, you as legislators and we as taxpayers have the right to know if the analyses on SCMagLev income and income sources versus costs for building, loan management, maintenance, and operation are financially sound. We all should have a clear picture of the level of subsidies needed to keep the SCMagLev system financially afloat before we make the decision to approve it being built. It is long past time that this information is made available to you and for our review.

SCMagLev will likely pull ridership from Amtrak, its rival and competitor in the high-speed train arena, which will require Amtrak subsidies to be increased. In effect, taxpayers, most of whom would not be able to afford a ticket to ride the SCMagLev, will be forced to subsidize two competing systems. Such funds will enrich the private SCMagLev investors, negatively impact existing transportation systems, and pull funding from other needed, more critical transportation infrastructure projects.

Let us remember our own prior experience in looking at a maglev system in Maryland. The Maryland Department of Transportation (MDOT) began to devote funding to the

development and evaluation of a Maglev system in FY2001. At that time, the FRA and MDOT commenced the Environmental Impact Study (EIS) for the project, as required by the National Environmental Policy Act (NEPA). The final EIS was never published because 2003 and 2004 state-enacted legislation prohibited the funding of the project as the result of the final report of the Task Force to Evaluate the Development and Construction of a Magnetic Levitation Transportation System. In its final report, issued in 2003, the task force noted that, among other challenges, a significant amount of funding would be required to implement a Maglev system in Maryland. It is very likely the SCMagLev will also require such taxpayer funds, and likely far more funding than the task force considered in its prior finding.

(4) SCMagLev Will Follow Previous World Experiences with Such Systems, Many of Which Have Failed or are Being Maintained with Large Government Subsidies.

I call your attention to a recent report by Ms. Carol Park, an analyst at the Center for Business and Economic Competitiveness at the Maryland Public Policy Institute entitled*:* "Lessons from Asia for the Northeast SCMagLev."[1]

To quote Ms. Park: "SCMagLev enthusiasts have been pushing the project despite warnings of significant risks, just like the supporters of the bullet train did in Asia. For instance, the South Korean government built the Seoul-Incheon line despite consistent warnings of inadequate demand. The project was politically, rather than commercially, driven as Korean officials wanted to present a futuristic version of Korea to the international community as part of the 2018 PyeongChang Winter Olympics." The line was closed in 2018 because 77 percent of seats were unoccupied.

Germany experimented with building a MagLev train. Following several years of development and building, with large and growing annual government subsidies, the lack of ridership, and a horrific crash that killed 70 percent of the passengers and injured the others on a system the Germans certified as safe, Germany abandoned the project.

For a current example of overpromise and underperformance, look no further than California's experience with its high-speed rail system, which has become a financial nightmare. With massive overruns, building delays, and homes, businesses, and private properties taken, there is still no working system. The governor finally "pulled the plug" and the project has been significantly downsized. However, destruction of farms, vineyards, and personal property has occurred with no value returned to the California community. The severely downsized system is still experiencing cost overruns and building delays.

Ms. Park states: "Supporters of SCMagLev dismiss these concerns. They argue that the success of bullet trains in Japan demonstrate that these hurdles can be overcome. That's exactly what officials in China, Taiwan and South Korea thought, only to discover that the

[1] Park, Carol. "Transportation Lessons from Asia for the Northeast Maglev." The Maryland Public Policy Institute. December 7, 2018. www.mdpolicy.org/research/detail/lessons-from-asia-for-the-northeast-maglev?fbclid=IwAR2C1sAfojicOFJ7J6jXCqvtGmKADrtVAopQpP7XRZnc38V25p8G5wWp2s4

situation in Japan is unique. Most of Japan's 128 million inhabitants live in a few densely populated cities. Many of those residents are rich enough to afford expensive train tickets."

Note: SCMagLev officials have repeatedly stated that ticket prices will be similar to Amtrak/Acela.

"Compared to Japan, the situation is the polar opposite in Baltimore, where many of the residents who depend on public transit are low-income workers. If these residents are to commute between Baltimore and D.C., they would need an option that is affordable and easily accessible from their homes." The SCMagLev is neither, whereas MARC provides a reliable and cost-effective transportation system, moving well over 8 million passengers into and out of Washington, D.C., annually.

(5) TNEM and BWRR Have Made Many Claims About Jobs and Revenues But Have Yet to Share the Analyses Supporting These Claims.

- The promoters of high-speed and maglev trains promise lots of jobs - But their job figures are often misleading or appear faulty. The underlying analyses, funded by a federal grant of public tax dollars, need to be made available for review.
- Many high-speed and maglev train projects across the world have cost far more than promised by the promoters. In some cases (e.g., California's high-speed train fiasco), there has been an increase of up to three times the original projected cost (to date and growing), requiring increasing amounts of government (i.e., tax dollar) subsidies. - Cost far more, need large tax-dollar subsidies.
- High-speed and maglev train projects across the world experienced building delays - Many have experienced protracted schedule overruns.
- BWRR says the SCMagLev will create between 75K and 100K jobs. Since 2017, we have asked to see the basis of this claim, the work breakdown projections, and information to substantiate their statements - We have not seen anything to substantiate their jobs projection.
- Jobs created to build the SCMagLev will be short term. Once the system is built between Baltimore and D.C., the jobs in Maryland will end. The construction jobs will then move north if BWRR gains approval to build to New York - Maryland will lose these jobs as the construction moves to Pennsylvania and New York, and many will need to find other jobs.
- If BARC, PRR, and the National Aeronautics and Space Administration's Optics Centers are put out of businesses, all the career, high-paying jobs will be lost from Anne Arundel and Prince George's Counties and the state of Maryland - Net effect - Maryland will lose many career, high-paying jobs.
- The tax dollars needed for high-priority transportation infrastructure projects will likely be required to subsidize the building and operation of the SCMagLev. After the SCMagLev is built, the construction jobs are finished, then the subsidies will likely be needed to maintain the operation of the system. These tax dollars should be used to maintain, repair, or enhance existing bridges, roads, and tunnels used by the vast majority of drivers and riders to commute and travel, as well as by commerce (e.g., trucking and delivery) vehicles, which is the financial lifeblood of Maryland - Tax dollars are better spent to help all residents, not the wealthy SCMagLev system owners and riders.

- The SCMagLev will take ridership from Amtrak and Acela, requiring increased subsidies to maintain the existing east coast rail system - Tax dollars will be used to subsidize two competing train systems.
- BWRR states that large numbers of vehicles will be taken off the road – Where is the analysis to support this claim? With the annual growth of traffic in Maryland, whatever savings BWRR states will be made would likely be overcome by the annual pre-COVID-19 growth. And, again, SCMagLev ridership will likely come from Acela or air flights, not cars commuting to D.C.
- COVID-19 has created a new wrinkle for BWRR's SCMagLev and all mass transit ridership projections. Many agencies and support businesses have proven their knowledge workers can work remotely. The cost of office space in D.C. is very high, and agencies and businesses are already looking at downsizing their office footprint and invest the rent savings back into mission-related work – How does this changing reality affect BWRR's claims? Where is the analysis?
- It is unlikely that greenhouse gases and road congestion will be reduced with the SCMagLev. The operation of SCMagLev maintenance vehicles would add to the existing traffic congestion - SCMagLev will unlikely reduce greenhouse gases and more likely create an increase in road congestion.
- Tax dollars should be used for the infrastructure we all rely on and need. The construction jobs generated will be long-term, as there are miles and miles of roads, bridges, and tunnels that need maintenance, repair, and enhancement - More long-term construction jobs will be available in Maryland rebuilding our transportation infrastructure.

(6) The Need for Other Far More High-Value Transportation Infrastructure Improvements Outweigh Wasting Funds on Building the SCMagLev.

Supporters of the SCMagLev state that the existing 150-year-old system is out of date and employs obsolete technology. I rode MARC and Amtrak into D.C. for nearly 30 years. Not once was I on a train that employed a wood-fired steam engine. Amtrak and MARC employ modern equipment, running on an upgraded high-speed rail system. Both are purchasing and implementing new, proven, state-of-the-art equipment.

Amtrak and the FRA completed an expensive multi-year EIS and review of Amtrak's Northeast Corridor Future (NEC) plan (2017).[2] One of the key findings in this report was that a new alignment was too expensive and not needed when the planned upgrades and rebuilding of the system was considered. With the FRA's approval of the *NEC Future* plan, Amtrak secured loans totaling $2.7 billion, and is actively engaged in upgrading rail, equipment, and stations all along the Northeast corridor.

Note: Maryland's own BWI Rail Station has been replaced with a larger, modern, new technology, and improved comfort building.

[2] U.S. Department of Transportation and Federal Railroad Administration. NEC Future: A Rail Investment Plan for the Northeast Corridor. Record of Decision. July 2017. https://www.fra.dot.gov/necfuture/pdfs/rod/rod.pdf.

Amtrak is building and testing the next generation of train equipment capable of speeds in the 200 miles-per-hour range. The train is being designed and built in the United States, by American unions and trades, not imported from overseas as with the SCMagLev. More information on Amtrak's *NEC Future* and the status of the second-generation Acela are readily available on the Internet.

Instead of wasting money to build a transportation system that will not serve Marylanders and take funds needed for transportation infrastructure, CATS, MCRT and a growing list of community, civic, and environmental organizations believe it would be far better to invest those funds into current Maryland transportation infrastructure.

For example, look around the room. Everything you see—the structure, paint, electrical, electronics, furniture, and clothes and shoes we are all wearing—was transported by commercial truck. Maryland's commerce requires a sound transportation infrastructure to operate efficiently. Such systems draw business to Maryland and improve the economic base of our state. How many Maryland bridges are rated C or lower and are in need of repair or replacement? Such work would be a far better use of Maryland's tax dollars and, for that matter, federal tax dollars, than investing in and subsidizing an unnecessary high-cost train for the elite, well-healed rider.

AND . . .
We have not addressed security concerns associated with having a 300-plus mile-an-hour train flying down an elevated section of track or through a tunnel. What catastrophic results would occur if someone is able to access the track and executes an attack? Who is going to maintain the security envelope and how many resources will the state and counties be required to provide? All of this would cost additional tax dollars, again better used elsewhere.

I agree with the *Lessons from Asia for the Northeast SCMagLev* report recommendation: "The Northeast Maglev project should be scrapped before it is too late. There are many transportation priorities that are worthier of attention."

There are two additional concerns to which I draw your attention:

(1) If built, the SCMagLev will potentially release toxins, carcinogens, and radon gas into our communities.

(2) If built, the SCMagLev will expose our school structures, personnel, and students to constant low-level vibration and oscillating magnetic fields as the train is running under them.

Concerns Explained:

(1) If built, the SCMagLev will potentially release toxins, carcinogens, and radon gas into our communities.

As described during the BWRR-Maryland Transit Administration (MTA) Open House (October 16, 2017) by the Louis Berger professional engineer, the ventilation facilities' primary purpose is to clear smoke in case there is a fire in the tunnel. Located every 3 to 4 miles apart along the

underground tunneled route, the ventilation units will force air into the tunnel on the side of the section filled with smoke as the next ventilation facility exhausts air from the tunnel. In other words, one ventilation facility will pressurize the tunnel ahead of the section with smoke while the alternate ventilation facility will depressurize the tunnel to exhaust the smoke into the atmosphere.

Our concern is that the source of a fire will likely be electrical. Such a fire consumes electrical insulation and lubricants. When burned, these fuel sources produce both toxic and carcinogen compounds that, according to the planned use of the ventilation system described, will exhaust these dangerous compounds into the atmosphere, exposing the surrounding communities to these unhealthy chemical compounds. Such carcinogen exposure released into the atmosphere can potentially create damaging respiratory effects, possibly leading to life-threatening scenarios for the residents living nearby the vents and inhaling these hazardous compounds.

Our question: What short-, mid-, and long-term health effect will this have on the affected community? If for nothing else, it will have a negative effect on property values. After all, who wants to raise their family next to a facility that may poison them at any time?

As you all know, Anne Arundel and Price George's Counties have naturally occurring radon gas. Radon gas is a known carcinogen, which is why homes and other buildings are tested across both counties. Infiltrating from the ground, this colorless and odorless gas finds its way into building basements through cracks and seams between the basement walls and concrete floor.

During the discussion with the professional engineer from Louis Berger hired to design the building of the SCMagLev, we asked about water infiltration, drainage, and pumped water removal, as the tunneling under Linthicum will likely intersect the aquifer. Also, there is the question about monitoring and venting naturally occurring gases that leak into the tunnel through the same openings through which ground water enters, as the tunnel will serve as a large collecting system for ground leaching gases as it transits Anne Arundel County and the southern section of Prince George's County 80 to 150 feet below the surface. When these ventilation facilities exhaust into the atmosphere, anyone near these facilities will also be exposed to any radon gas collected in the tunnel. As with all radioactive materials, the intensity and length of time of exposure determines the severity of the side effects. Therefore, any low-level exposure, whether to radiation over a short or long time period, will likely have negative effects on the human body that will result in health issues to some degree. Further, like long-term exposure to low-level radiation, long-term exposure to low levels of electromagnetic radiation may also have cumulative health effects on the human body and needs to be evaluated.

Our questions: What long-term cumulative health effect will radon gas and electromagnetic radiation exposure have on the affected community as radioactive radon gas is vented into the atmosphere through the ventilation facilities? What is the long-term health impact of exposure to low-level oscillating electromagnetic fields as the SCMagLev transit passes under our homes, businesses, and schools and their playgrounds?

(2) If built, the SCMagLev will expose our school structures, personnel, and students to constant low-level vibration and oscillating magnetic fields as the train running under them.

As the train passes underground below our schools, homes, and businesses, what effect will the resulting vibration have on the structures? As you know, masonry structures do not fare well with constant exposure to vibration. Given that most of our homes and businesses are built on concrete foundations and masonry walls, continuous exposure to even low-level vibrations will likely have a cumulative effect, to include cracking and then water penetration, negatively impacting the structural integrality of the building. Such cracks allow groundwater and rainwater runoff to enter basements. Besides damp and wet basements, mold growth becomes another potential human health issue.

In Summary:

The CATS and MCRT have provided a list of reasons why the SCMagLev should be stopped now before Maryland is leveraged into a position where it has no choice but to make use of our needed tax dollars to directly or indirectly fund the SCMagLev building, maintenance, operation, and security. Our tax dollars will be better spent to replace, repair, and enhance existing transportation infrastructure. The CATS and MCRT have pointed out the potential of venting toxins, carcinogens, and radioactive gas into our communities. The CATS and MCRT have noted the serious concerns we have about our health with exposure to radioactive gas and low-level electromagnetic fields and the cumulative health impact these would have on our residents.

And my concluding question:

Are you willing to expose our children to find out what will be the health effects?

Again, thank you for this opportunity to speak before you this afternoon, and provide written testimony and our white papers on reasons to oppose the SCMagLev to your Committee.

Attachments:

Attachment 1 (embedded): “Lessons from Asia for the Northeast SCMagLev” (two pages).

Short Informational MCRT-CATS Position Papers (attached):
(1) CATS-MCRT Rpt - SCMagLev Biological Impact - 20210111
(2) CATS-MCRT Rpt - SCMagLev Biological Impact (Part 2) - 20210111
(3) CATS-MCRT Rpt - Amtrak the Better Alternative - 20210111
(4) CATS-MCRT Rpt - The Next Generation of Acela - 20210111
(5) CATS-MCRT Rpt - SCMagLev Community Impact - 20210111
(6) CATS-MCRT Rpt - SCMagLev Safety - 20210111
(7) CATS-MCRT Rpt - SCMagLev Safety (Part 2) - 20210111

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Citizens Against the SCMagLev (CATS) is a confederation of scientists, engineers, experts, community organizations and citizens in support of transportation infrastructure improvements

that benefit our communities, state, and nation. CATS opposes the construction of an expensive transportation system serving a small minority of the wealthy at the cost of taxpayer funds far better used to maintain and improve the transportation infrastructure needed and used daily by all citizens, businesses, and commerce. For up-to-date information on the SCMagLev opposition, see our Facebook page at: www.facebook.com/groups/CitizensAgainstSCMaglev.

Maryland Coalition for Responsible Transit (MCRT) evaluates transit projects for social equity, environmental justice, economic viability, and community accessibility. We believe that the Baltimore Washington (BW) SCMagLev must be stopped in order to implement future transit projects that meet our criteria of a much lower price and much less risk and impact to communities. Thus, we support the no-build option and are working to stop this project through the National Environmental Policy Act process. For more information about MCRT see our website at: www.mcrt-action.org.

Attachment #1

Report from the Center for Business and Economic Competitiveness at the Maryland Public Policy Institute

Lessons from Asia for the Northeast SCMagLev

Originally published in the *Daily Record*.
December 7, 2018

In China, a bullet train crash in the city of Wenzhou in 2011 killed 40 people. The crash was blamed on poor design and mismanagement. In Taiwan, the bullet train system rang up $1.5 billion in losses over seven years, requiring a $1 billion government bailout to date. In South Korea, a high-speed rail line connecting Seoul to Incheon closed in 2018 after just four years of service because 77 percent of seats were unoccupied.

Across the Pacific Ocean, supporters of "SCMagLev" in the United States are gearing up to create an American version of the Asian rail disasters. The Northeast Maglev is a proposed magnetic levitation train that would travel at 311 miles per hour, carrying passengers between Baltimore City and Washington, D.C. in 15 minutes. The Maglev team hopes to start construction on the ostensibly private project in 2020.

SCMagLev enthusiasts have been pushing the project despite warnings of significant risks, just like the supporters of the bullet train did in Asia. For instance, the South Korean government built the Seoul-Incheon line despite consistent warnings of inadequate demand. The project was politically, rather than commercially, driven: Korean officials wanted to present a futuristic version of Korea to the international community as part of the 2018 PyeongChang Winter Olympics.

SCMagLev supporters in Maryland have similar non-business motives for backing the project. Baltimore has been experiencing a steady population decline over the years, and many supporters believe that connecting the city to economically vibrant D.C. could reverse that trend. This vision has blinded the advocates to serious concerns about the project.

First, though the project purports to be a private effort, high-speed train projects are generally magnets of questionable government subsidies. "We can't build our infrastructure 100 percent privately," said Wayne Rogers, the CEO of Northeast Maglev. Building the SCMagLev line from Baltimore to D.C. is estimated to cost between $12 billion to $15 billion (Others believe the cost will be far more). So far only $5 billion in private investment has been secured for the project, so taxpayers will be on the hook to finance the rest of the project, likely taking funds needed for other far more valuable national infrastructure projects.

Second, it's highly doubtful the SCMagLev will attract sufficient ridership to make it economically viable. According to SCMagLev officials, the service would target the "elite business travelers" and charge higher prices than Amtrak, which already provides regular rail service between the two cities, and is in the process of upgrading their infrastructure, equipment and stations to support faster trains on existing right-of-ways. Just as with the Seoul-Incheon line, there are also numerous bus companies that provide affordable trips along the Baltimore-D.C. route.

Finally, building the Northeast Maglev will inevitably disrupt the communities along the line because of noise and electromagnetic fields, destruction of homes and businesses during the building of the elevated portions of the line, as well as destruction of remaining green space between Baltimore and D.C., and the negative environmental impacts of tunneling, not to mention the hurtling trains. As the planned SCMagLev will only make three stops, the affected residents are unlikely to experience any commercial or economic development in their neighborhood. In short, residents along the route will pay the high price and receive little to no benefit from the SCMagLev.

Supporters of SCMagLev dismiss these concerns. They argue that the success of bullet trains in Japan demonstrate that these hurdles can be overcome. That's exactly what officials in China, Taiwan and South Korea thought, only to discover that the situation in Japan is unique. Most of Japan's 128 million inhabitants live in a few densely populated cities. Many of those residents are rich enough to afford expensive train tickets.

Compared to Japan, the situation is the polar opposite in Baltimore, where many of the residents who depend on public transit are low-income workers. If these residents are to commute between Baltimore and D.C., they would need an option that is affordable and easily accessible from their homes. The SCMagLev is neither. MARC provides that reliable and cost-effective transportation system, that last year moved over 8 million passengers into and out of D.C.

The Northeast Maglev project should be scrapped before it is too late. There are many transportation priorities that are worthier of attention.

In early 2018, Baltimore's Metro subway line closed for a month. According to the American Public Transportation Association, the closure was due to the Maryland Transit Administration's lack of expertise and poor communication. Meanwhile, the D.C. Metro system is a never-ending series of service disruptions, crumbling infrastructure and safety failures.

If Maryland wants to improve its transportation system, it should focus on ensuring that its existing projects are safe and managed properly. Whether this is done by restructuring the MTA or by privatizing some of its operations to incentivize better performance, it will not take billions of dollars to ensure that Maryland residents have reliable public transportation.

According to SCMagLev's Chair, Wayne Rogers, "Infrastructure is fundamentally a government responsibility, which has failed." He is right. Many governments across the ocean have failed by partnering with private companies to build trains that turned out to be costly, dangerous, and increasingly reliant on government support. We can avoid recreating the same high-speed catastrophe in North America by abandoning the Northeast Maglev now.

The author of the original article is Carol Park, a senior policy analyst in the Center for Business and Economic Competitiveness at the Maryland Public Policy Institute. She can be reached at cpark@mdpolicy.org.

Source: Park, Carol. "Transportation Lessons from Asia for the Northeast Maglev." December 7, 2018. The Maryland Public Policy Institute. www.mdpolicy.org/research/detail/lessons-from-asia-for-the-northeast-maglev?fbclid=IwAR2C1sAfojicOFJ7J6jXCqvtGmKADrtVAopQpP7XRZnc38V25p8G5wWp2s4.

CATS-MCRT Rpt - Amtrak the Better Alternative - 20

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AMTRAK - the Better Alternative

By: Dan Woomer
Edited by: Susan McCutchen

January 11, 2021

The Baltimore-Washington Rapid Rail (BWRR) (the project developer) and the Northeast MagLev (TNEM) (the promotional entity) have the short-term goal of obtaining Federal Railroad Administration (FRA) approval to build a magnetic levitation (maglev) train between Baltimore and Washington, DC, with the long-term goal of extending the train operation to New York City by way of Philadelphia. Japan's Superconducting Magnetic Levitation (SCMagLev) train is the high-speed, ground-based transportation system TNEM is promoting to build in the northeast corridor of the United States.

Information about the SCMagLev and BWRR's plans to build and operate the system have raised many questions and concerns. This is one of a series of articles that identifies and discusses some the many questions and concerns citizens and communities have identified with moving forward in building and operating the SCMagLev.

Abstract

The existing Amtrak train system, with its ongoing work to improve and enhance services and ridership experience, provides demonstrable evidence that supports the argument for its continued development. It is a far better and more cost-effective solution to address the rail transportation needs of the Northeast Corridor than the construction of the SCMagLev train system - an expensive, elite, and commercially unproven technology system that presents many unanswered safety and financial questions, as well as harmful community and environmental issues.

About Amtrak

Amtrak currently provides intercity passenger rail service with over 21,000 route-miles of track across 46 states, including the District of Columbia, and Canada. Amtrak's *Acela Express*, *Northeast Regional*, *State Supported*, and *Long-Distance* rail services between Boston, New York, Philadelphia, Baltimore, and Washington, DC, provide an expansive array of services for passengers and commuters. As the majority owner of the Northeast Corridor (NEC), Amtrak provides coordinated passenger and freight rail service planning for the NEC, as well as infrastructure access and operational support to eight commuter rail authorities — including the Maryland Area Regional Commuter (MARC) and the Virginia Railway Express (VRE) — and four freight rail operators. Amtrak's long experience as the U.S. high-speed operator, and the NEC end-to-end user, provides a unique, profound, and expert insight and perspective about the Baltimore-Washington passenger rail transportation network.

Questions & Concerns

(1) Amtrak and the Federal Railroad Administration (FRA) have already analyzed the passenger rail transportation needs between Baltimore and Washington, DC, and found a new train route was not necessary.

- Amtrak's *NEC Future* program has already addressed the mobility challenges of the Baltimore-Washington, DC, travel corridor with a focus on the role of passenger rail in meeting current and future

challenges.[1] The FRA has already completed a lengthy and costly evaluation of future transportation needs and considered the capacity constraints of the total transportation system — including rail, highway, and air — to complete a programmatic Environmental Impact Study (EIS) of the *NEC Future* proposals and plans, and Amtrak received FRA's approval. The EIS focused on technology-neutral rail passenger technologies. Although a new alignment (route) was considered, the option of building one was ruled out as being unduly expensive and unnecessary. Instead, the preferred alternative focused on improving the existing rail alignment (route).

(2) The framework for passenger rail investment between Baltimore and Washington, DC, is already in place.

- Amtrak, the owner of the NEC between Baltimore and Washington, DC, works collaboratively with the FRA, MARC, and VRE, as well as the Northeast Corridor Commission, the states of Maryland and Virginia, Washington, DC, the Maryland Transportation Authority (MTA), the District of Columbia Department of Transportation (DCDOT), the Washington Metropolitan Area Transit Authority (WMATA), and others, to develop the *NEC Future* to address current and future needs, solve problems, prepare plans, and invest in passenger rail between Baltimore and Washington, DC.

(3) The ability to evaluate the environmental consequences of building and operating the SCMagLev is unclear.

- The SCMagLev technology proposed by BWRR is not a proven rail technology nor has it been commercially successful. Data and experience are not yet available to evaluate the potential effects of building and operating the SCMagLev train system on the local and regional economies, existing transportation systems, and the human and natural environment, as required in a Draft Environmental Impact Study (DEIS) and EIS.

- Additionally, BWRR has clearly indicated this is only the first segment of an SCMagLev line they propose to extend from Baltimore to Boston and Massachusetts to the north, and from Washington, DC, to Charlotte, North Carolina, to the south. This indicates that the current SCMagLev scope provides neither true independent utility nor the full scope of the project as required for a DEIS and EIS.

(4) Substantial investment in passenger rail transportation is already underway between Baltimore and Washington, DC.

- Amtrak, Citizens Against the SCMagLev (CATS), the Maryland Coalition for Responsible Transit (MCRT), and a growing number of community organizations, environmental groups, and elected officials at the county, state, and federal levels, question the competing priorities between the Baltimore-Washington SCMagLev project and Amtrak's ongoing upgrades and enhancements.

- The SCMagLev calls for construction of a separate maglev network with new guideways, stations, and maintenance facilities. To fund this massive construction, BWRR is anticipating funding from a mix of federal and private sectors.

- Amtrak's *NEC Future's* EIS to renew and modernize the NEC infrastructure between Washington, DC, Baltimore, Philadelphia, New York City, and Boston was approved by the FRA. The new $4.7 million

[1] U.S. Department of Transportation and Federal Railroad Administration. *NEC Future: A Rail Invest Plan for the Northeast Corridor*. *Record of Decision*. July 2017. https://www.fra.dot.gov/necfuture/pdfs/rod/rod.pdf. Referred to throughout this white paper.

recently-renovated Baltimore-Washington Airport rail station used by both Amtrak and MARC is an example of this renewal in progress (see photos).[2, 3]

Original BWI Rail Station. Photo by Bob E.

New BWI Rail Station. Photo by B. Taylor

- *NEC Future* has confirmed the need for passenger rail investment on the existing corridor between Baltimore and Washington, DC, including the replacement of the Baltimore and Potomac Tunnels, additional right-of-way and track segments, and modernization and expansion of the Washington Union Station. These and other crucial NEC projects are already well along in the planning process, most having completed the engineering and environmental clearance stages. Several of the upgrade projects have been completed. Over the next 5-10 years, the cost to complete them will require substantial financial commitment from the federal government, Amtrak, and others. These commitments are in direct competition with the plans of BWRR and their proposed SCMagLev train system. BWRR's anticipated January 2021 DEIS must justify the need for the SCMagLev as compared with Amtrak services, acknowledging that Amtrak is already providing passenger and commuter transportation and improving their array of services and NEC systems.

- BWRR has openly and repeatedly stated and testified that further public investment has already been committed and they will pursue their efforts to secure additional public, including tax dollar, investments. However, as noted previously, major public passenger rail transportation support (tax dollars) has already been committed to Amtrak and the associated improvements and construction is underway. Public-private investment in projects noted in the *NEC Future* are also underway. To date, Amtrak has secured a $2.5 billion loan with the FRA to purchase new high-speed trains and construct the infrastructure needed to optimize high-speed rail service between Baltimore and Washington, DC.[4]

Findings/Conclusion

(1) Amtrak does not operate independently. It continues to work collaboratively with the FRA, NEC, MTA, MARC, VRE, DCDOT, and WMATA, as well as the states of Maryland and Virginia, Washington, DC, and others. They have jointly developed the *NEC Future*, prepared the approved Passenger Rail Corridor Investment Plan—which includes enhancement projects through 2040 and beyond—and have started

[2] E., Bob. Photo of original BWI Rail Station. May 29, 2016. foursquare.com/v/bwi-amtrakmarc-rail-station-bwi/4ac9c22bf964a5201ec020e3/photos.
[3] Taylor, Barbara H. Photos of newly renovated BWI Rail Station and rededication. *The Baltimore Sun*. December 10, 2019. www.baltimoresun.com/travel/bs-md-new-train-station-20191210-u3tc4uizfbc2zn3djp7c2rxije-photogallery.html.
[4] Clabaugh, Jeff. Amtrak's new Acela fleet is on the move (see it). January 23, 2020. https://wtop.com/business-finance/2020/01/amtraks-new-acela-fleet-is-on-the-move-see-it/.

implementing the planned improvements and enhancements to the Northeast Corridor rail system and service.

(2) CATS, MCRT, and Amtrak (which has a history of successful EIS preparation and approval), cannot determine the environmental impact of the SCMagLev train project because: "Data and experience are not yet available to evaluate the potential effects of maglev on the economy, transportation system, and the human and natural environment as is required in a DEIS and EIS."

(3) Amtrak's *NEC Future* has moved past the planning process, including successfully completing the environmental clearance and initial engineering stages, to beginning the actual upgrades and building phase. Financial commitments include a $2.5 billion loan to purchase high-speed trains and construct the infrastructure needed to improve high-speed train travel along the Northeast Corridor.

(4) Amtrak's *NEC Future*-related EIS was the result of a costly four-year study, to which the regional, state, and federal stakeholders have concurred and approved Amtrak's recommendations and financial plans to proceed with the enhancement of existing right-of-way, equipment, and facilities.

Continued development and support of Amtrak is a far better solution than moving forward with building the SCMagLev transportation system. Amtrak and its options provide a reliable, technically and financially-proven system at a reasonable cost for near- and long-distance rail transportation that accommodates commuters and passengers. After four years of study by the FRA, which involved the significant use of financial and human resources, and extensive engagement with stakeholders — the federal government, states, cities, the railroads, and the public — the already-completed, approved, and published *NEC Future* lays out a sound plan and investment approach to address the NEC's current and future needs. This approved plan should remain the blueprint for the future of passenger rail transportation between Baltimore and Washington, DC, as well as for the Northeast Corridor.

The competitive SCMagLev transportation system, by comparison, is inordinately expensive, commercially unproven, and potentially damaging to people, communities, and the environment. There are many unanswered safety issues, and it is very likely large government subsidies (tax dollars) will be required to build and maintain and operate the SCMagLev. SCMagLev, a transportation system for the elite and well-heeled traveler, is not justified and should not be approved.

Want to Help?
(1) Share this information with your family, friends, neighbors, and community.
(2) Join our Facebook page: www.facebook.com/groups/CitizensAgainstSCMaglev.
(3) Contact your elected officials to express your opposition to building the SCMagLev, go to: myreps.datamade.us.
(4) Submit multiple public comments often at www.bwmaglev.info/index.php/contact-us. State your objection(s), and always end by saying you support the "No Build Alternative."
(4) Learn more about the concerns and impacts the SCMagLev will have on our communities, see: www.stopthistrain.org/.
(5) Make a contribution to support Citizens Against the SCMagLev (CATS) and Maryland Coalition for Responsible Transit (MCRT) at mcrt-action.org. Your donation, in any amount, is appreciated. Thanks for your support!

About the Author
Daniel E. Woomer is a community activist and technical expert. He retired after a long career that included positions with Westinghouse Defense Center, Johns Hopkins University's Applied Physics Laboratory, and the U.S. Department of Energy (DOE). During his career with the DOE, he worked in various positions with the

Energy Information Administration and the Office of Congressional and Intergovernmental Affairs, and he helped set up the Office of Technology Transitions. He also served for several years as an adjunct faculty member with the University of Maryland University College, where he developed and taught mathematics, supervisory and leadership classes.

Sources:

(1) Campbell-Lorenc, AICP, Janet. Letter to Mr. Bradley M. Smith, Director of the Office of Freight and Multi-modalism, Maryland Department of Transportation. Amtrak, Corporate Planning. January 31, 2017.
(2) Woomer, Dan. "SCMagLev - AMTRAK Comment Submission to the Baltimore-Washington Rapid Rail Environmental Impact Study." January 5, 2018
(3) Wikipedia. "BWI Rail Station." en.wikipedia.org/wiki/BWI_Rail_Station.

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Citizens Against the SCMagLev (CATS) is a confederation of scientists, engineers, experts, community organizations and citizens in support of transportation infrastructure improvements that benefit our communities, state, and nation. CATS opposes the construction of an expensive transportation system serving a small minority of the wealthy at the cost of taxpayer funds far better used to maintain and improve the transportation infrastructure needed and used daily by all citizens, businesses, and commerce. For up-to-date information on the SCMagLev opposition, see our Facebook page at: https://www.facebook.com/groups/CitizensAgainstSCMaglev.

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MARYLAND COALITION FOR RESPONSIBLE TRANSIT

SCMagLev - What's the Biological and Ecological Impact?

By: Dan Woomer January 11, 2021
Edited by: Susan McCutchen

The Baltimore-Washington Rapid Rail (BWRR) (the project developer) and the Northeast MagLev (TNEM) (the promotional entity) have the short-term goal of obtaining Federal Railroad Administration (FRA) approval to build a magnetic levitation (maglev) train between Baltimore and Washington, DC, with the long-term goal of extending the train operation to New York City by way of Philadelphia. Japan's Superconducting Magnetic Levitation (SCMagLev) train is the high-speed, ground-based transportation system TNEM is promoting to build in the northeast corridor of the United States.

Information about the SCMagLev and BWRR's plans to build and operate the system have raised many questions and concerns. This is one of a series of articles that identifies and discusses some the many questions and concerns citizens and communities have identified with moving forward in building and operating the SCMagLev.

Abstract

This article explores some of the biological and ecological impacts on Maryland's and the nation's environment associated with building and operating the SCMagLev train system.

The SCMagLev proposed alignment (route) runs underground between Baltimore and Washington, except in one location. This is where the train emerges aboveground and includes two elevated guideways, as well as an aboveground industrial trainyard where the trains are cleaned, maintained, repaired, and stored. To function, this trainyard, which would cover approximately 200 acres, must be completely flat and be able to withstand the weight of thousands of tons of equipment without deforming. To understand the industrial nature of this trainyard, refer to the one built in China that is slightly smaller than the one proposed to be located on our public lands. There will be few significant differences between deployment between the two locations; while watching, the reader must ask whether this type of land use is appropriate for public refuge, research, and conservation lands.[1]

Questions & Concerns

(1) What impact would building the planned SCMagLev trainyard have on our preserved lands?

- A trainyard would normally be built in an industrial zone within a large city where power, housing, and a skilled workforce would be co-located. The trainyard would be sited in a landscape already built to accommodate and minimize the runoff, lighting, pollution, and ecological impacts such intense and industrial land use requires. Siting a trainyard in a preexisting trainyard would properly place it in a landscape that was long-ago compromised ecologically and currently dedicated to human commercial and business needs. In the same fashion, refuges and parks are dedicated to the needs of wildlife, conservation, research, and the human needs for nature, solitude, clean water, clean air, and a place to recharge our own batteries.

[1] Shanghai High-Speed Train Yard. www.youtube.com/watch?v=OKPqHKmpAOE&fbclid=IwAR0nDnM0VxLlfQVQUUJo0rJ-1Y7V0WBOQvuVbQVJ4ptCn6eu2I0IbwCSKsE%29%29%29.

- However, the SCMagLev plan sites the train emerging from its underground tunnel to slice through, destroy, and disrupt the last large, ecologically intact green space left in the Prince George County region. When the SCMagLev train parasitically emerges aboveground, it would access a planned 200-acre industrial site, currently located on existing conservation lands. Building these train lines and trainyards also requires upgrading the existing small rural roads to industrial standards, as well as the creation of a new, high-powered, electrical system and associated transmission corridors. All this development would be placed into an existing, large intact landscape of protected forests, wetlands, and fields, the last such area in the region.

- To accomplish this section of the SCMagLev project, BWRR must have this protected public land transferred to their corporation and be given permission from several federal, city, state, and county agencies to build the trainyard. Agencies and municipalities unwilling to transfer this land may have their land taken by BWRR through eminent domain, a power that was granted as part of the train operation license of the defunct Baltimore and Annapolis Train Company that was purchased by BWRR.[2]

- The protected parklands in questions are public properties, set aside and preserved for the use of the people of the United States, the local communities, and scientific research. None of these lands have ever been transferred to private hands, and never to groups wishing to build an industrial center.

- Such a transfer of lands is problematic. It sets a precedent for future transfers to private hands of projects that could be deemed "in the public good," allowing construction such as upscale homes, shopping centers, sand and gravel operations, and parking lots, on lands that would never recover from the destruction of the natural environment. Transfers like this lean only one way, toward ecological destruction, and never toward preservation or the good of the area's environment.

(2) What are some of the permanent, unrecoverable biological damages building the SCMagLev trainyard would have?

- *The bottom line*: Building a 200-acre trainyard results in absolute, irreversible ecological damage to the land. The landscapes currently targeted for support and maintenance for the SCMagLev trains have been in forest for millennia. They contain plants, such as the White Fringed Orchid, that are globally rare. The Pitch Pine Barrens ecosystem is at its southern terminus and is also globally rare. This landscape of protected government parklands and research centers is large enough to support and retain almost all the biodiversity that was once, but is no longer, found across the Baltimore-Washington region.

- Much of that biodiversity outside this protected area has been lost, or greatly diminished, due to the combinations of housing developments, shopping malls, business centers, roadways and other built-up industrial, transportation, and recreational facilities. That altered landscape can no longer support most species that once lived and thrived in this area and, instead, is composed mostly of the weeds and nonnative species that follow development and invade the remnant natural landscapes.

- Researcher C. K. Khoury, after reviewing all the public lands in the United States, indicated that the Patuxent Research Refuge (PRR) retains the most biodiversity of the wild relatives of our crop plants, one of many examples of both how rich the biodiversity of the area remains and how important it is to

[2] "Eminent domain refers to the power of the government to take private property and convert it into public use. The Fifth Amendment provides that the government may only exercise this power if they provide just compensation to the property owners." See: https://www.law.cornell.edu/wex/eminent_domain.

keep this repository. He points out that many of these important wild native plants that could be important for our food security are now rare, un- or under-represented in genetic repositories.[3]

- BWRR's planned removal of the 200-acre preserve for the SCMagLev trainyard is of an intensity and magnitude that would result in the complete destruction of the existing natural preserve and the invasion and corruption of hundreds of nearby acres.

- All three of the proposed trainyards are located at the headwaters of stream systems of both the Potomac and Patuxent Rivers. These stream systems are filled with fragile springs, bogs, fens, and other wetlands. Their loss and the subsequent pollution from the runoff from these trainyards would bring large pulses of silt and industrial-related, chemical-laden water, all pushed downstream. Rain events would punish and degrade all the streams below these sites.

- The creation of these industrial sites requires the removal of all trees, plants, creatures, and topsoil on the site to level the area to accommodate these long trains. Several feet of gravel, sand, and concrete would be placed on top of this flattened landscape to stabilize the roadbed so that it would be able to handle the weight of all the trains and attendant heavy equipment. Factories would be built both to create and repair these trains. Parking lots would be created for the sites' employees. Roadways would need to be built and augmented to handle the weight of industrial vehicles and increased commuter traffic. In addition, new transmission lines and substations would need to be located to handle the high-energy needs for the site.

- The building of this trainyard in the middle of our protected public lands, as with what has occurred at other industrial sites, would create an invasion portal for non-native species—Tree of Heaven, Asian Bittersweet, Privet, Bush honeysuckle, Norway Rats, House Mice, Kudzu, and many more. These invasive plants and animals would infiltrate the surrounding parklands, seriously disrupting the native wildlife in the area, causing outright destruction of the natural hydrology of the springs, and seeping support of the rare plant and animal communities that filter and preserve our drinking water. This development would inject light, noise, vibration, and pollutants on and into our public parklands, repelling the very animals such refuges are specifically designed to protect and study.

(3) What plant and animal communities would be lost?

- The planned site for the SCMagLev trainyard is currently a large protected green space where land, plant, insect, and animal studies have been conducted by public, academic, and private researchers for over 100 years. From this century of work, a long list of species have been scientifically described for the first time and named using specimens found in this area. Literally hundreds of publications have been generated from work done on these public lands. (*Note*: Patuxent is the sole research refuge in the entire National Wildlife Refuge system and the U.S. Department of Agriculture's Beltsville Agricultural Research Center [BARC] is the largest agriculture research station in the world). This region is one of the biologically best-documented sites in the world.

    - The Patuxent Research Refuge has the largest species list of dragonflies and damselflies of any national wildlife refuge or national park in the United States—approximately 112 species. It contains

[3] Khoury, Colin. K. "Crop wild relatives of the United States require urgent conservation action." 2020. https://www.pnas.org/content/early/2020/12/09/2007029117.

more known species of bees than any other national wildlife refuge in the United States—approximately 221 species, with more new ones found each year. This refuge has what are likely complete, or nearly so, lists of all the plants, mammals, snakes, fish, amphibians, and birds that inhabit the many types of intertwined streams, wetlands, plant communities, and rivers.

- Building the SCMagLev trainyard on the proposed site would destroy these species' habitat, effectively destroying the existing diverse nature living therein. Once built, these lands could never be recovered and the losses could never be mitigated or recreated elsewhere. These current protected areas act as a unit, a compete landscape. They function and exist in connection and relationship with each other, allowing plants and animals to migrate and reestablish populations sequentially across the region as local ecological circumstances change. Destruction of this system with the building of the SCMagLev trainyard and maintenance facilities, would kill this system. The trainyard would result in a new biological desert that would jeopardize the remaining neighboring landscape of trees, forests, and fields, and their inhabitants. When large-scale disasters, such as the inevitable hurricanes, tornadoes, floods, and fires occur, the ability of the remaining habitats to recover would be seriously compromised.

- As an analogy, if you were very wealthy and politically powerful, you could build your house from blocks of stone removed from the National Cathedral in such a way that the cathedral would be left standing. However, with the next earthquake, the cathedral would collapse because your predation of those blocks has weakened the edifice to the point of structural failure. Who would do that? Placing the SCMagLev trainyard in this protected, vulnerable, and endangered site would equally weaken it. Such wounds would ultimately cause the last forested cathedral in the region, an area held sacred to the surrounding communities, to collapse., However, unlike the National Cathedral, the area can never be rebuilt or restored.

(4) Who are the current public landowner groups and what are their lands?

- The National Park Service (NPS) owns and manages the land around the Baltimore-Washington Parkway (Parkway) in the project area. The roadway is purposely surrounded by an unbroken swath of woodlands that connect it to the PRR and BARC. The SCMagLev train lines would run parallel to the Parkway and destroy a wide path through these woods, leaving a strip of woodlands isolated between the Parkway and the train line. This would cause them to be ecologically isolated and functionally dead from the lack of connection to the contiguous PRR and BARC woodlands, and open the construction area to the invasion of weeds and non-native plants. The north- and south-bound lanes are only 40 feet wide; however, the SCMagLev line would be 130-feet wide, dwarfing the impact of the Parkway.

- The U.S. Fish and Wildlife Service owns the PRR, which would be substantially impacted by this project in several locations with the building of the trainyard. The research refuge is home to the Patuxent Wildlife Research Center. It is also home to some of the best-known and most-studied groups of animals and plants in the world. The refuge is currently an almost unbroken swath of woodlands, wetlands, headwater streams, and bottomlands bisected by both the Big and Little Patuxent Rivers.

- The BARC is the world's largest agricultural research center. It was created over 100 years ago and has housed hundreds of research scientists who have used the facility to study all aspects of agriculture. The grounds are a complex of fields, pastures, research areas, study plots, and natural areas.

- The National Aeronautics and Space Administration (NASA) Goddard Space Flight Center would be affected by this project. In the BARC-EAST proposed trainyard (primarily to be located on the PRR and BARC), some of the trainyard would directly impact NASA's optical test site. This site was chosen

because the surrounding area was dark, silent, and isolated by the surrounding woodlands and fields. SCMagLev's impacts on the NASA facility would come from adding vibration, light, and sounds that are not compatible with its functioning.

- The Greenbelt Forest Preserve is 254.8 acres of forested land owned by the City of Greenbelt and protected and conserved in their existing natural state for the use and enjoyment of present and future generations. The city purchased the parcels that became the preserve in the mid-1990s and passed legislation in 2003 to designate these lands as a protected "Forest Preserve." This designation protects the land from development and retains it in a natural forested state. Several of the largest, most contiguous forested parcels, which comprise approximately 145 acres, are threatened by the proposed SCMagLev's J1 alignment (route) option. Sixty-five acres would be destroyed by that route, including 12 acres of wetlands. In addition, 6.5 of those acres are designated and protected as Wetlands of Special State Concern by the state of Maryland. The 145 acres are part of a larger unbroken patch of forest that runs from the community gardens at Gardenway to Beaverdam Road in the City of Greenbelt.

- The Forest Preserve is protected by more than municipal ownership. The Maryland-National Capital Park and Planning Commission owns a woodland covenant on one of the largest parcels, which was purchased using Maryland's Program Open Space (POS) funds.[4] Land purchased using POS funds shall be perpetually protected green space and are federally protected under the Land and Water Conservation Fund Act of 1965. The NPS owns scenic easements on 65 acres of the North Woods Tract of the preserve. These easements establish a federal interest in the green space, such that this land falls within the legal boundaries of the Parkway, although the City of Greenbelt retains ownership of the land itself. Finally, the preserve is protected under Section 4(f) of the 1966 U.S. Department of Transportation Act,[5] which prohibits the construction of transportation projects within protected green space or historical landmarks unless it is shown that no "feasible or prudent" alternative exists. And as we have identified and discussed in other articles, alternative transportation systems already exists, namely Amtrak & MARC.

- Anne Arundel County has parklands adjacent to the Parkway south of Maryland City, as well as just north of the North Tract of the refuge. The parcels along the west side of the Parkway include playfields for baseball, football, and soccer, as well as a popular dog park. The parcel north of the North Tract includes baseball playfields and floodplain wetlands, as well as the riparian forest along the Little Patuxent River.

- The District of Columbia and the federal government owns some of the land. The Oak Hill site where the proposed Route 198 trainyard would be located is an 800+-acre triangular area bounded by Maryland Route 198 on the south, the Parkway on the northwest, and Maryland Route 32 on the northeast. The Little Patuxent River traverses the site. The majority of this site is composed of an 827-acre parcel owned by the U.S. government, but it has been managed and operated by the District of Columbia since 1921, pursuant to the Federal Appropriations Act of 1923.[6] Historically, the District operated several facilities on site, including the Forest Haven Asylum, which closed in 1991; the Cedar Knoll Youth Center, which closed in 1993; and the Oak Hill Youth Center, which closed in 2009. Currently, the site houses the Maya Angelou Academy at New Beginnings and the Maryland Job Corps' Woodland Job Corps Center. The Maryland Environmental Trust, the Scenic Rivers Land Trust, and the Patuxent

[4] See: https://dnr.maryland.gov/land/Pages/ProgramOpenSpace/home.aspx.
[5] See: https://www.environment.fhwa.dot.gov/env_topics/4f_tutorial/overview.aspx?h=e/.
[6] See: https://www.loc.gov/law/help/statutes-at-large/67th-congress/Session%204/c67s4ch148.pdf.

Tidewater Land Trust hold a conservation easement on 250 acres of the site. A great majority of the site is undeveloped. Riparian and upland forest dominate the undeveloped areas, coupled with acidic seepage swamps, wet meadows, emergent wetlands, and the river itself.

- The proposed trainyard would impact both the developed and undeveloped areas. It would require the destruction of the Woodland Job Corps Center, impact more than a dozen private landowners, and destroy parts of the historic Forest Haven Asylum. It would destroy approximately 115 acres of upland forest and 25 acres of riparian forest, as well as destroy a 2.5-acre forested, groundwater-fed wetland and a 3-acre wet meadow. The published footprint of the trainyard crosses the Little Patuxent River, which would necessitate moving the course of the river. The published footprint of the trainyard would impinge on the conservation easement by 25 acres. The footprint for Route Option J of the SCMagLev viaduct would impinge on the property on the northeast boundary. It would destroy a large beaver pond and several vernal pools with a documented presence of marbled and spotted salamanders, as well as destroy several acres of riparian wetlands.

Findings/Conclusion

There are many issues, questions, and concerns about the building and operation of the SCMagLev will have on the area ecology, environment, and people living near and alongside the guideways, or who study and make use of these forested areas. This article identifies and explores but a few.

Want to Help?

(1) Share this information with your family, friends, neighbors, and community.
(2) Join our Facebook page: www.facebook.com/groups/CitizensAgainstSCMaglev.
(3) Contact your elected officials to express your opposition to building the SCMagLev, go to: myreps.datamade.us.
(4) Submit multiple public comments often at www.bwmaglev.info/index.php/contact-us. State your objection(s), and always end by saying you support the "No Build Alternative."
(4) Learn more about the concerns and impacts the SCMagLev will have on our communities, see: www.stopthistrain.org/.
(5) Make a contribution to support Citizens Against the SCMagLev (CATS) and Maryland Coalition for Responsible Transit (MCRT) at mcrt-action.org. Your donation, in any amount, is appreciated. Thanks for your support!

About the Author

Daniel E. Woomer is a community activist and technical expert. He retired after a long career that included positions with Westinghouse Defense Center, Johns Hopkins University's Applied Physics Laboratory, and the U.S. Department of Energy (DOE). During his career with the DOE, he worked in various positions with the Energy Information Administration and the Office of Congressional and Intergovernmental Affairs, and he helped set up the Office of Technology Transitions. He also served for several years as an adjunct faculty member with the University of Maryland University College, where he developed and taught mathematics, supervisory and leadership classes.

Sources:

The principal source of information for this article is information and discussion with Sam Droege. He grew up in Prince George's County and has worked as a biologist for the past 40 years, specializing in the survey and monitoring of plants and animals.

(1) For high-quality, public domain downloadable photos of insects and other small creatures found in 2020 from the impact sites, see: www.flickr.com/photos/usgsbiml/albums/72157715288371553.

(2) For photos of the natural areas and agricultural areas that would be destroyed with the building of the SCMagLev, see: www.flickr.com/photos/189298652@N03/albums/72157715119662111.
(3) For short, low-elevation flyovers of the trainyard site at Maryland Route 198, see: www.flickr.com/photos/189298652@N03/50427339292/in/album-72157715119662111/.
(4) To watch a flight over the Patuxent refuge and the proposed SCMAGLEV trainyard site, see: https://www.flickr.com/photos/189298652@N03/50426482948/in/album-72157715119662111/
(5) To watch another flight over the Patuxent Refuge and Beltsville Agriculture Research Center and the proposed SCMagLev trainyard site, see: www.flickr.com/photos/189298652@N03/50426482948/in/album-72157715119662111/.
(6) An interactive GIS map showing locations of SCMagLev impact areas and overlays of wetlands and other features are found at: dcgis.maps.arcgis.com/apps/webappviewer/index.html?id=ae88f4ed5cff435cb96b9990bc15e997.

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MARYLAND COALITION FOR RESPONSIBLE TRANSIT

SCMagLev - What's the Biological and Ecological Impact? (Part 2)

By: Dan Woomer January 11, 2021
Edited by: Susan McCutchen

The Baltimore-Washington Rapid Rail (BWRR) (the project developer) and the Northeast MagLev (TNEM) (the promotional entity) have the short-term goal of obtaining Federal Railroad Administration (FRA) approval to build a magnetic levitation (maglev) train between Baltimore and Washington, DC, with the long-term goal of extending the train operation to New York City by way of Philadelphia. Japan's Superconducting Magnetic Levitation (SCMagLev) train is the high-speed, ground-based transportation system TNEM is promoting to build in the northeast corridor of the United States.

Information about the SCMagLev and BWRR's plans to build and operate the system have raised many questions and concerns. This is one of a series of articles that identifies and discusses some the many questions and concerns citizens and communities have identified with moving forward in building and operating the SCMagLev.

Abstract

This article takes a deeper look into the existing species and types of specimens of life that would be lost and destroyed if BWRR gains approval to build the SCMagLev train system.

Questions & Concerns

(1) What value do the Beltsville Agricultural Research Center and the Patuxent Wildlife Research Refuge bring to the state, the nation, and the world?

- The U.S. Department of Agriculture Beltsville Agricultural Research Center (BARC) and Patuxent Research Refuge (PRR) represent one of the most biologically well-studied landscapes in the world with intense research and natural history data going back over 100 years.

- Hundreds of government scientists have conducted research and continue to work in these locations, many identifying and describing new species, and most doing research related to the agriculture and natural areas retained by these properties. As part of their duties, lists of species found here were created and their status documented via physical collections. They were accessioned to the National Collection, where numerous scientific publications about them, including their biological functions and processes, were documented and monitored across the many past decades and into the present time.

- Both research centers represent the largest scientific field stations for their respective U.S. federal agencies. The region is a treasure trove of species of animals, plants, and fungi that were first described by science here, and represents one of the most important discovery locations on the North American continent and in the world.

- Building the SCMagLev as currently planned would destroy this site forever.

(2) What else could happen to the area if the SCMagLev trainyard would be built?

- If the SCMagLev train system is allowed to be built, a large block of the current preserve and refuge will be destroyed forever. Once the SCMagLev trainyard is built, there would be little that could be done to stop additional development and the loss of all remaining forested and protected land in the area.

- Research at BARC has identified over 100 species and ongoing research will undoubtedly find many more.

- The region has retained much of its original biodiversity. For example, the PRR has retained all its breeding bird species except for two—the Broad-winged Hawk and the Bachman's Sparrow. Similar results exist for all the other groups of plants, fungi, insects, and vertebrates.

- The combined protected landscapes of several government agencies have created an integrated and interconnected refuge for the region's plant, animal, fungi, and microorganisms. The extensive nature of these landscapes allows the species living in them to ebb and flow in space and time without becoming locally extinct because of small parcel sizes.

- One of the many important pieces of research in this area was conducted in the 1970s. The study looked at the impacts of forest fragmentation on woodland birds. This research was conducted by two collaborating scientists, Robert Whitcomb (BARC) and Chandler S. Robbins (PWRC). Many of the plots used in these studies are located in the SCMagLev proposed-use areas in BARC.[1]

- These past and current study sites cannot be recreated elsewhere. Once the landscape is altered with anthropogenic disturbances to the soils, and the vegetation removed and replaced with man-made structures, the land is dead for all practical purposes to scientists and to all the original plant, insect, and animal inhabitants.

- In addition to studies by employees of these agencies, the work of past researchers and the existence of ongoing study plots, taxonomic experts, and extensive documentation of the flora and fauna of the region attract other researchers from states, universities, and private groups from around the world. This research and the related economic benefits for the area would be lost.

- The long-abandoned airport area of BARC/PRR has been and is particularly important for rare birds. Over the years, sightings of nationally and regionally extremely rare species have been reported. Some of these rare birds that nest or pass through this area include the Northern Shrike, the Short-eared Owl, the Whip-poor-will, the Merlin, LeConte's Sparrow, the Sandhill Crane, and the Dickcissel. The abandoned airport still retains breeding Eastern Meadowlarks and Grasshopper Sparrows, which are almost completely absent elsewhere in the area. Raptors and grassland species use this area heavily. This is one of the very few remaining transitional habitats; elsewhere, they have become rare or completely absent.[2]

[1] R.F.Whitcomb, C.S. Robbins, J.F. Lynch, B.L. Whitcomb, M.K. Klimkiewicz, and D. Bystrak. Edited by: Robert L. Burgess and David M. Sharpe. 1981. "Effects of forest fragmentation on avifauna of the eastern deciduous forest."
[2] Orr, Richard. Photos of the Wildlife and Animals living on and around the Old BARC Airport. www.flickr.com/photos/dragonflyhunter/albums/72157611555242488.

- As cited on the Friends of Patuxent[3] and BARC[4] websites, BARC has 901 documented plant species, and PRR has 282 species of birds, 217 species of bees, and 72 species of butterflies. “Thousands of insect specimens have been collected from the combined properties of BARC and PRR,” as noted by Sam Droege, an entomologist. “These specimens are published in various research papers. Several thousand, including ones I have identified, are in my database.” (personal conversation with Dan Woomer, 2020)

- This area is also one of the most important places in the world where prehistoric fossil strata have been found. A rich strata of dinosaur bones and associated fossils and, perhaps even more rare, dinosaur trackways, have been and are being found here. These significant prehistoric life discoveries have been found on BARC at the Swampoodle Site. The region, known as “Dinosaur Alley,” was the primary source of Maryland dinosaur bones in the nineteenth century, collected by both the Yale Peabody museum and local collectors; many of the prehistoric fossils found in this area are currently residing in the Smithsonian Instititution. Other well-known prehistoric fossil locations are located at NASA Goddard and in nearby Muirkirk at the Maryland-National Capital Park and Planning (M-NCPP) Dinosaur Park, which bracket the BARC sites.[5]

- To date, 16 unique type specimens of dinosaurs and fossils have been found in this area and named from these collective sites—and more are likely to be found. The specimens identified and named include the *Glyptops caelatus*, *Rogersia angustifolia*, *Argillomys marylandensis, Goniopholis affinis, Jungermannites noterocladioides, Rogersia angustifolia, Pelletixia amelguita, Arundelemys dardeni, Arundelconodon hottoni, Tanyoscapha sigmanae, Ornithomimus affinis, Priconodon crassus, Pleurocoelus altus, Pleurocoelus nanus, Allosaurus medius*, and *Coelurus gracilis*.

- Of great importance was the type specimen of *Astrodon* Johnstoni found in the 1800s, which was named as Maryland’s state dinosaur in 1998. The *Astrodon* lived in Maryland during the Early Cretaceous period, from 95 to 130 million years ago.

- It has been stated about the M-NCPPC region: "Dinosaur Park is the best place to find Cretaceous dinosaur bones in the Eastern United States, and as it happens the best place to find Cretaceous dinosaur footprints on this side of the Mississippi River.”[6]

- Avocational fossil hunter Ray Stanford first started finding dinosaur tracks near College Park, Maryland, in the early 1990s. With the help of professionals and other amateurs (including Dinosaur Park’s own David Hacker), over 300 specimens have been recovered to date. Note that these same trackways have been found at NASA Goddard and similar rock formations occur throughout the sites currently planned to be leveled and used for the SCMagLev trainyard.

- In the forested area, studies have shown that BARC Central and East Natural areas are the southernmost points in the world of the New Jersey Pine Barrens ecotype. Note that the BARC East Farm is the land to the east of and the BARC Central Farm is the area just to the west of the Baltimore-Washington Parkway. The BARC East Farm contains the National Champion Dwarf Chinquapin Oak (*Quercus prinoides*) and the State Champion Sand Hickory (*Carya pallida*).

[3] See: http://friendsofpatuxent.org/.
[4] See: https://www.ars.usda.gov/northeast-area/beltsville-md-barc/beltsville-agricultural-research-center/.
[5] For additional information on Prince George’s County Dinosaur Park, see: www.mncppc.org/3259/Dinosaur-Park, and mncppcapps.org/pgparks/dino_blog/dino_article.aspx?articleid=17.
[6] http://mncppcapps.org/pgparks/dino_blog/dino_article.aspx?articleid=17.

- Globally rare, federal- and state-protected wetlands crisscross both tracts. This landscape represents what is most likely the most silent and light-free landscape left in the Baltimore-Washington Corridor.

- As noted in a prior article, the proposed SCMagLev trainyard enveloping BARC East would be located next to NASA's Optical Test Site and other testing facilities that cannot tolerate vibration or light pollution from a SCMagLev's trainyard facility.

(3) How big is the proposed SCMagLev trainyard?

- The proposed SCMagLev trainyard is approximately 1-mile long by a quarter-mile wide. As a useful comparison, that measures:

    - about one-and-one-fifth times as big as Disneyland.
    - about six times as big as the Pentagon.
    - about 50 times as big as the Kennedy Center.
    - about 150 times as big as a football field.
    - more than three times larger than the 12, 000 parking spaces at Robert F Kennedy Stadium; the proposed area could fit up to 55,000 parking spaces.

(4) Are the losses to Maryland and the United States associated with building the SCMagLev worth it?

- No. Maryland, our nation, and the world will suffer from the loss of species, biodiversity, and access to prehistoric history in this refugia if this proposed project should be approved. Building an expensive, tax-dollar-supported, high-speed transportation system for the wealthy and well-heeled, with little to no long-term value for Anne Arundel or Prince George's counties or Maryland would be of little value, in fact, a major loss on top of the other losses described.

- We would seriously weaken the last large green space between Baltimore and Washington, DC, should the SCMaglev transportation system be built. This area is well-loved by surrounding communities, and their inhabitants would lose the cooling, carbon storage, air pollution capture, calming, and spiritual aspects of this green area space. Recreational runners, walkers, and bicyclists would lose a large part of what is a relatively safe, nature-focused public road network where they can exercise in a healthy environment. Fossil sites would be permanently destroyed and/or rendered unavailable. The region would lose one of the last noise- and light-free environments found between Baltimore and Washington, DC.

(5) What are some of the types of specimens that have been found, identified, and studied in this area?

- Fungi include: *Arthrocristula hyphenata, Arthrocristula hyphenata, Cryptodiaporthe liquidambaris, Cryptodiaporthe liquidambaris, Discosporina carpinicola, Discosporium liquidambaris, Ditopellopsis clethrae, Endophragmiella constricta, Endophragmiella constricta, Endophragmiella constricta, Endophragmiella constricta, Hamigera insecticola, Hyalotia pistacina, Melanconiella elegans, Monilinia fructigena, Mycoleptodiscus terrestris, Myiocoprula gregaria, Ophiognomonia lenticulispora, Ophiognomonia micromegala, Ophiognomonia sassafras, Ovulinia azaleae, Pestalotia longisetula, Phomopsis oxyspora, Polyporus pseudocinnamomeus, Pseudocoprinus venustus, Sesquicillium candelabrum, Sphaceloma plantaginis, Sphaerulina rubi, Sporidesmium sclerotivorum, Trichoderma asperellum,* and *Wrightoporia cylindrospora.*

- Insects include: *Acanalonia conica, Aeolothrips annectans, Aeolothrips annectans, Andrena uvulariae, Anthrax nigripennis, Aulacus schiffi, Baldulus tripsaci, Brachythrips russelli, Brenthis selene marilandisa, Caryomyia aggregata, Caryomyia albipilosa, Cedusa gedusa, Cedusa hedusa, Ceratocapsus barbatus , Ceratocapsus decurvatus, Chrysops vitripennis, Clastoptera proteus anceps, Dolichopus flavilacertus, Forcipomyia mcateei, Hammomyia marylandica, Heterothrips azaleae, Hyalomyzus pocosinus, Hydroporus signatus youngi, Lasioglossum gotham, Madiza nigripalpis, Minettia buchanani, Myrsidea emersoni, Oxythrips divisus, Paracalocoris colon var. amiculus, Paracalocoris colon var. castus, Paracalocoris hawleyi var. fissus, Paracalocoris limbus suffusus, Paracalocoris scrupeus bidens, Phytocoris difficilis, Poanes massasoit hughi, Proctophyllodes pirangae, Prodiplosis platani, Psocus additus, Rhyacionia granti, Trichogramma marylandense, Tricyphona macateei, Typhlocyba eurydice, Typhlocyba eurydice var. discincta,* and *Typhlocyba gillettei var. casta.*

- Invertebrates include: *Babesia mephitis, Babesia procyoni, Besnoitia akodoni, Besnoitia neotomofelis, Besnoitia tarandi, Capillaria pirangae, Cladotaenia cathartis, Cryptosporidium canis, Cryptosporidium ryanae, Cryptosporidium ubiquitum, Cryptosporidium xiaoi, Cysticercus setiferous, Dicelis nira, Eimeria granulosa, Glaphyrostomum mcintoshi, Haemobartonella procyoni, Lotmaria passim, Loxogenes bicolor, Sarcocystis lindsayi, Trichuris sylvilagi, Paratylenchus marylandicus, Meloidoderita polygoni, Aorolaimus helicus, Criconema eurysoma, Criconema civellae, Heterodera weissi, Xiphinema americanum, Meloidoderita polygoni,* and *Allodiplogaster josephi.*

Findings/Conclusion

The loss of the BRAC and PRR preserves for the building of the SCMagLev transportation system would be tragic and irreversible. Major research facilities of national and world importance would be destroyed. The habitat for hundreds of rare birds, insects, and fungi would be lost forever. Suffering such losses to build a redundant, high-cost, and taxpayer-supported transportation system for the elite and well-heeled that has little to no benefit for Marylanders would be unconscionable.

Want to Help?
(1) Share this information with your family, friends, neighbors, and community.
(2) Join our Facebook page: www.facebook.com/groups/CitizensAgainstSCMaglev.
(3) Contact your elected officials to express your opposition to building the SCMagLev, go to: myreps.datamade.us.
(4) Submit multiple public comments often at www.bwmaglev.info/index.php/contact-us. State your objection(s), and always end by saying you support the "No Build Alternative."
(4) Learn more about the concerns and impacts the SCMagLev will have on our communities, see: www.stopthistrain.org/.
(5) Make a contribution to support Citizens Against the SCMagLev (CATS) and Maryland Coalition for Responsible Transit (MCRT) at mcrt-action.org. Your donation, in any amount, is appreciated. Thanks for your support!

About the Author
Daniel E. Woomer is a community activist and technical expert. He retired after a long career that included positions with Westinghouse Defense Center, Johns Hopkins University's Applied Physics Laboratory, and the U.S. Department of Energy (DOE). During his career with the DOE, he worked in various positions with the Energy Information Administration and the Office of Congressional and Intergovernmental Affairs, and he helped set up the Office of Technology Transitions. He also served for several years as an adjunct faculty member with the University of Maryland University College, where he developed and taught mathematics, supervisory and leadership classes.

Sources:

The principal source of information for this article was from correspondence and discussion with Sam Droege. He grew up in the Prince George's County and has worked as a biologist for the past 40 years, specializing in the survey and monitoring of plants and animals.

(1) For high-quality, public domain downloadable photos of insects and other small creatures found in 2020 from the impact sites, see: www.flickr.com/photos/usgsbiml/albums/72157715288371553.
(2) For photos of the natural areas and agricultures areas that would be destroyed with the building of the SCMagLev transportation system, see: www.flickr.com/photos/189298652@N03/albums/72157715119662111.
(3) To see short, low-elevation flyovers of the Maryland Route 198 trainyard site, see: www.flickr.com/photos/189298652@N03/50427339292/in/album-72157715119662111/.
(4) To watch a flight over the Patuxent Refuge and proposed SCMAGLEV trainyard site, see: https://www.flickr.com/photos/189298652@N03/50426482948/in/album-72157715119662111/
(5) To watch another flight over the Patuxent Refuge and Beltsville Agriculture Research Center and the proposed SCMagLev trainyard site, see: www.flickr.com/photos/189298652@N03/50426482948/in/album-72157715119662111/.
(6) For an interactive GIS map showing locations of SCMagLev impact areas and overlays of wetlands and other features are found, see: dcgis.maps.arcgis.com/apps/webappviewer/index.html?id=ae88f4ed5cff435cb96b9990bc15e997.
(7) R.F.Whitcomb, C.S. Robbins, J.F. Lynch, B.L. Whitcomb, M.K. Klimkiewicz, and D. Bystrak. Edited by: Robert L. Burgess and David M. Sharpe. 1981. “Effects of forest fragmentation on avifauna of the eastern deciduous forest.” pubs.er.usgs.gov/publication/5210469.

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Citizens Against the SCMagLev (CATS) is a confederation of scientists, engineers, experts, community organizations and citizens in support of transportation infrastructure improvements that benefit our communities, state, and nation. CATS opposes the construction of an expensive transportation system serving a small minority of the wealthy at the cost of taxpayer funds far better used to maintain and improve the transportation infrastructure needed and used daily by all citizens, businesses, and commerce. For up-to-date information on the SCMagLev opposition, see our Facebook page at: https://www.facebook.com/groups/CitizensAgainstSCMaglev.

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MARYLAND COALITION FOR RESPONSIBLE TRANSIT

What Impact Would the SCMagLev Have on Our Communities?

By: Dan Woomer January 11, 2021
Edited by: Susan McCutchen

The Baltimore-Washington Rapid Rail (BWRR) (the project developer) and the Northeast MagLev (TNEM) (the promotional entity) have the short-term goal of obtaining Federal Railroad Administration (FRA) approval to build a magnetic levitation (maglev) train between Baltimore and Washington, DC, with the long-term goal of extending the train operation to New York City by way of Philadelphia. Japan's Superconducting Magnetic Levitation (SCMagLev) train is the high-speed, ground-based transportation system TNEM is promoting to build in the northeast corridor of the United States.

Information about the SCMagLev and BWRR's plans to build and operate the system have raised many questions and concerns. This is one of a series of articles that identifies and discusses some the many questions and concerns citizens and communities have identified with moving forward in building and operating the SCMagLev.

Article Summary

BWRR's current plan is to bore a tunnel 80 to 150 feet below ground level (as measured from the top of the guideway) under more than half of any proposed route. The inside diameter of the proposed tunnel is 43 feet. The goal is to maintain at least 14 meters (about 46 feet) of soil between the top of the tunnel and the foundations of any structure being tunneled under. Most of the tunneling will take place in Anne Arundel County. The current plan is to tunnel from the Baltimore station to the Baltimore-Washington International Airport and on to southern Anne Arundel County, emerge from underground to a raised guideway through one section of Prince George's County, descend back underground through another section of Prince George's County, and continue underground into and end at the Washington DC station.

To support the underground portion of the system, BWRR intends to build surface facilities to house ventilation plants and emergency exits spaced every three (3) to four (4) miles along the tunnel segments that can be as large as 1.5 acres. Also, BWRR plans call for building power substations and other facilities above and along the route.

In this article, we identify and discuss some of the questions and concerns about the negative impact on communities through which the SCMagLev system will run, as well as the support systems and structures the it requires to be built and operated to support this expensive system.

Questions & Concerns

(1) What will be the impact of tunneling under residential and commercial structures?

- *Tunneling Depth*: Residential foundations are about 10 feet deep. The tunnel itself has an inside diameter of 43 feet; additionally, 2 feet is the estimated thickness of the tunnel walls. The estimate of the depth of the tunnel is 80 feet. The top of the tunnel would only be about 35 feet below the foundation.

- Commercial structures sometimes have foundations that are larger and deeper than those of most residential structures.

- During the tunneling for the Baltimore subway, several building foundations shifted as the tunneling progressed. It was very expensive to relevel and reinforce the shifted foundations.

    - Question - How likely is it that BWRR be willing to correct and repair foundation problems caused by the tunneling to our home and businesses?

- As stated by Cosema Crawford, PE, Senior Vice President representing Louis Berger (the engineering firm hired to study the building of a superconducting maglev train between Washington and New York), compared with the tunneling under Baltimore, the planned SCMagLev tunneling between Baltimore and BWI will be deeper underground and it will employ the latest tunneling equipment that produces less vibration. However, masonry and concrete structures (e.g., foundations and foundation walls) do not respond well to some vibrations; that is, such structures tend to crack as they do not uniformly vibrate. Cracks in foundation walls result where the vibration energy finds a weak point. Such cracks weaken the support for the structure above and lead to water infiltration. In other words, ground and/or surface water (rain and downspout runoff) seeps into the basement. Wet basements bring additional damage to the structure and anything located in the basement (such as furnaces, washers and dryers, and furniture). The increased moisture creates dangerous mold and other serious heath and safety problems for people who live in single-family homes and apartment complexes, as well as for those who work or play in commercial or other types of buildings (e.g., schools, churches).

(2) What dangers do ventilation and emergency access/exit structures bring into our communities?

- BWRR planning calls for the building of ground-level ventilation structures. These structures are required for the ventilation of smoke in the event of fire and will likely also house emergency evacuation stairs. BWRR plans to build one of these surface facilities every three (3) to four (4) miles along the tunnel segments.

- At the October 17, 2017, BWRR-Maryland Transit Administration (MTA) Open House, Ms. Crawford provided the following information:

    - The ventilation facilities' primary purpose is to clear smoke in case there is a fire in the tunnel. The ventilation units will force air into the tunnel on one side of the tunnel section with smoke, and the next ventilation facility will exhaust the smoke-filled air from the tunnel. In other words, one ventilation facility will pressurize the tunnel ahead of the section of the tunnel with smoke and the alternate ventilation facility will depressurize the tunnel to exhaust the smoke to the atmosphere.

    - What kind of fire could occur in a SCMagLev tunnel section? If the fire resulted from a train accident or some type of electrical event, the fuel for the fire could be lubricants, plastics, and electrical wire insulation. "When plastic is burned, it releases dangerous chemicals such as hydrochloric acid, sulfur dioxide, dioxins, furans and heavy metals, as well as particulates. These emissions are known to cause respiratory ailments and stress human immune systems, and they're potentially carcinogenic." (Biemiller, quoting Noelle Eckley Selin, Massachusetts Institute of Technology, 2013).[1,2]

[1] Biemiller, A. "Can we safely burn used plastic objects in a domestic fireplace? No, you can't. Don't even think about it…" School of Engineering, Massachusetts Institute of Technology. Posted March 12, 2013. https://engineering.mit.edu/engage/ask-an-engineer/can-we-safely-burn-used-plastic-objects-in-a-domestic-fireplace/

[2] To see the current list of known and probable cancerogenic substances from the American Cancer Society, go to: www.cancer.org/cancer/cancer-causes/general-info/known-and-probable-human-carcinogens.html.

- Clearly, such occurrences could create potential human health impacts. These could include the possibility that toxic and cancer-causing compounds and substances could be exhausted into our communities at any time from these SCMagLev tunnel ventilation facilities. Further, the impact on the value of private properties near these facilities could be negatively affected.

    - Question - Who wants to live near a ventilation facility that will potentially spew out toxic and cancer-causing smoke at any time?

(3) Ventilation facilities collecting and releasing radioactive gas into our communities?

- The proposed tunneling route from Baltimore to BWI and onto southern Anne Arundel County, and under Prince George's County into Washington, DC, includes areas with known radon gas levels of .02 pCi/L to 4.0 pCi/L.[3,4]

- Maryland is a radon gas "hot spot." Average measurements across the state range for 0.2 pCi/l to 61 pCi/L.[5] Radon (symbol Rn, atomic weight 86) is a radioactive gas released from the normal decay of the elements uranium, thorium, and radium in rocks and soil. It is an invisible, odorless, and tasteless gas that seeps up through the ground and diffuses into the air. In a few areas, depending on local geology, radon dissolves into ground water and can be released into the air when the water is used. Radon gas usually exists at very low levels outdoors. However, in areas without adequate ventilation, such as underground mines (or the SCMagLev tunnel?), radon can accumulate to levels that substantially increase the risk of lung cancer."[6]

- A 43-foot diameter tunnel, 80 to 150-feet below ground-level, starting in Baltimore and ending in southern Anne Arundel County will be see the collection of Radon Gas. As high-speed trains run through the tunnel, the air pressure wave at the front of the train will build, forcing air displacement to the sides and over the top of the train, and other lower air pressure areas, including ventilation shaft openings to the surface. If Radon Gas is present, this radioactive gas will be pushed out into the community through the ground-level ventilation facilities. While the level of radioactive gas will likely be low, the impact on the private property values near these facilities will be negatively affected.

    - Question - Who wants to live near a ventilation facility that will potentially spew out cancer-causing radioactive gas at unknown times and levels?

Findings/Conclusion

There are many issues, questions, and concerns about the safety of the SCMagLev operation of both passengers and people living near and alongside the guideways, as well as above the tunneled sections. This article identifies and explores only a few associated with the planned ventilation facilities releasing toxic and cancer-causing smoke and radioactive gases into our communities.

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[3] About Radon Levels in Anne Arundel County. www.county-radon.info/MD/Anne_Arundel.html - Radon levels in Anne Arundel County average 3.3 pCi/L, with a range from under 2 pCi/L to 61 pCi/L. (Note: pCi/L stands for Picocuries Per Liter.)

[4] About Radon Levels in Prince Georges County. www.county-radon.info/MD/Prince_Georges.html - Radon Levels for Prince George's County also range from 2 pCi/L to over pCi/L. (Note: pCi/L stands for Picocuries Per Liter.)

[5] Radon Levels Across Maryland. phpa.health.maryland.gov/OEHFP/EH/Pages/Radon.aspx.

[6] American Cancer Society. "Radon and Cancer. Last reviewed December 6, 2011. www.cancer.gov/about-cancer/causes-prevention/risk/substances/radon/radon-fact-sheet.

Want to Help?
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(2) Join our Facebook page: www.facebook.com/groups/CitizensAgainstSCMaglev.
(3) Contact your elected officials to express your opposition to building the SCMagLev, go to: myreps.datamade.us.
(4) Submit multiple public comments often at www.bwmaglev.info/index.php/contact-us. State your objection(s), and always end by saying you support the "No Build Alternative."
(4) Learn more about the concerns and impacts the SCMagLev will have on our communities, see: www.stopthistrain.org/.
(5) Make a contribution to support Citizens Against the SCMagLev (CATS) and Maryland Coalition for Responsible Transit (MCRT) at mcrt-action.org. Your donation, in any amount, is appreciated. Thanks for your support!

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(2) Baltimore-Washington Rapid Rail (BWRR) and Maryland Transit Administration (MTA) SCMagLev information posters displayed at Bowie State University Open House. October 14, 2017.
(3) Crawford, C.E., PE. Senior Vice President, Louis Berger (engineering firm). Discussion with Dan Woomer at the BWRR and MTA SCMagLev Open House at Arundel High School. October 16, 2017.
(4) Louis Berger. MagLev-United States http://www.louisberger.com/our-work/project/maglev-united-states.
(5) Radon. https://en.wikipedia.org/wiki/Radon.
(6) Woomer, D. "SCMagLev - Info from Today's BWRR-MTA Open House." Nextdoor Linthicum Posting. October 14, 2017.
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(11) About Radon Levels in Anne Arundel County. www.county-radon.info/MD/Anne_Arundel.html - Radon levels in Anne Arundel County average 3.3 pCi/L, with a range from under 2 pCi/L to 61 pCi/L. pCi/L stands for Picocuries Per Liter.
(12) About Radon Levels in Prince Georges County. www.county-radon.info/MD/Prince_Georges.html - Radon Levels for Price Georges County also range from 2 pCi/L to over pCi/L. pCi/L stands for Picocuries Per Liter.
(13) Radon Levels Across Maryland. phpa.health.maryland.gov/OEHFP/EH/Pages/Radon.aspx.
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MARYLAND COALITION FOR RESPONSIBLE TRANSIT

Is the SCMagLev Safe? (Part 2)

By: Dan Woomer
Edited by: Susan McCutchen

January 11, 2021

The Baltimore-Washington Rapid Rail (BWRR) (the project developer) and the Northeast MagLev (TNEM) (the promotional entity) have the short-term goal of obtaining Federal Railroad Administration (FRA) approval to build a magnetic levitation (maglev) train between Baltimore and Washington, DC, with the long-term goal of extending the train operation to New York City by way of Philadelphia. Japan's Superconducting Magnetic Levitation (SCMagLev) train is the high-speed, ground-based transportation system TNEM is promoting to build in the northeast corridor of the United States.

Information about the SCMagLev and BWRR's plans to build and operate the system have raised many questions and concerns. This is one of a series of articles that identifies and discusses some the many questions and concerns citizens and communities have identified with moving forward in building and operating the SCMagLev.

Abstract

This article identifies and discusses questions and concerns about the structural safety standards being used to assure passenger crash survivability and the impact of the SCMagLev operation on the residents living near the guideways. The trial operation of the SCMagLev train on the present 26-mile test track in rural Japan, mostly in tunnels, does not fully validate its ability to function safely and reliably in day-to-day, high-frequency service in the urban and suburban environment of the Baltimore-Washington metropolitan area. The German maglev accident of September 22, 2006, which killed 23 people after the safety of the system had been certified by the German government should be a cautionary note as this project is considered.

Questions & Concerns

(1) The Federal Railroad Administration (FRA) approval process must first consider safety before deciding whether to allow construction.

- The SCMagLev safety decisions, that is, the "Rule of Particular Applicability" (RPA),[1] should be completed by the FRA before the Final Environmental Impact Statement (FEIS) or any authorization for construction is issued. This ordering of priorities, in addition to being common sense, is supported by the U.S. Department of Transportation (USDOT) report *Pathways to the Future of Transportation* (USDOT, p.3).

    - SCMagLev safety is an important issue, as confirmed by the reporting of an accident on the German maglev at Lathen, the location of the Emsland Transrapid Test Facility, on September 22, 2006. This occurred after its safety had been approved by the German government. Twenty-three (70 percent) of the passengers riding the German maglev system at the time of the accident were killed and the rest were injured.

    - On December 15, 2016, Louis Cerny, past executive director of the American Railway Engineering Association, submitted commentary to BWRR asking a series of important safety questions. BWRR responded to Mr. Cerny on January 23, 2017. Their reply included the statement: "Issues related to safety will be addressed in the RPA process." This or similar language was the only answer to six of the critical safety questions he raised.

(2) Japanese wheel-rail history is not transferable to SCMagLev experience.

- Successful Japanese safety experience with high-speed wheel-rail trains since 1964 is no more transferable to the SCMagLev technology than was German high-speed wheel-rail (called ICE) technology to its maglev. The Japanese SCMagLev currently operates on a test track and has not yet operated in regular service. Revenue service on the planned line between Tokyo and Nagoya is not expected to begin until 2027 at the earliest, with many questions being raised in Japan about whether that date can be met.

(3) More questions about the safety issues with SCMagLev vehicles.

- Especially worrisome is the lack of information and data on the crashworthiness of the SCMagLev train and its structural ability to protect occupants of the vehicles. The existing FRA vehicle strength standards are in 49CFR, part 238. Regulation 238.703, for instance, requires a basic vehicle compressive strength. There are many additional requirements. As detailed in Mr. Cerny's comments, there are good reasons the required compressive strength for SCMagLev vehicles should be at least as high or even higher than those for Amtrak trains.

- It is a fatal safety flaw in the project if the current SCMagLev technology cannot support the vehicle weight necessary to meet existing vehicle crashworthiness and occupant protection standards. The Japanese, as the Germans before them, appear to be refusing to provide vehicle compressive strengths. It seems that the present course of action is to push for project approval before SCMagLev vehicle and passenger safety regulations are established.

- Kemp and Smith detail the arguments for the need for crashworthiness of maglev vehicles. In referring to the German "Transrapid" maglev, their report states: "The Transrapid policy is that vehicles do not need inherent crashworthiness as they will be under close computer control and thus will not crash. The Emsland accident reinforces the fact that, even if there are rigorous procedures to prevent an accident, they are never foolproof. The same is true of automatic systems." (Kemp and Smith, 2007, p. 9). The accident at Lathen would seem to blunt or even negate the argument that computer control will ensure safety.

- The SCMagLev is an extremely complex technological way of accomplishing what is achievable by the relative simplicity of steel wheels and rails.

    - Components of the SCMagLev vehicles must be kept at the unimaginably cold temperature of around 450 degrees below zero Fahrenheit. What are the safety consequences if the elements containing the supercooled liquid are ruptured in an incident?

    - The complexity of having to individually extend and retract dozens of wheels prior to and after each station when speeds drop below 93 miles per hour raises many safety issues. For example, what happens if there is a power failure of the system when the SCMagLev is travelling over 300 miles per hour? Will the train drop to the guideway prior to the wheels coming down? What happens when the SCMagLev hits the guideway at 300 miles-per-hour?

- This will be the first time the FRA is being asked to approve a passenger train operation without a human driver (engineer) on each train. What are the guidelines the FRA will implement to review and approve this driverless high-speed train?

(4) What is the electromagnetic radiation danger from the SCMaglev guideway?

- BWRR has stated that there would be a " … need to maintain a minimum distance of 20 feet between the magnets along the guideway and people traversing below." (BWRR, November 2018, p. 42). This is clearly a negative environmental effect on the area below elevated guideways and, therefore, needs to be discussed in the DEIS and as part of the RPA. Is the 20-feet "avoidance zone" sufficient? Note that the electromagnetic radiation levels associated with the operation of the SCMagLev train are much higher than those generated by the German Transrapid maglev.

- BWRR also explains how passengers will walk under the guideway in tunnel sections during emergency tunnel egress (BWRR, November 2018, p. 10; also see Appendix B: Figure B-3). How would the passengers be shielded from the SCMagLev's electromagnetic radiation, considering that the distance below the guideway is less than 20 feet? The same question applies to concourses under the guideway at stations (BWRR, November 2018, Appendix B: Figure B-2).

(5) The Japanese are questioning environmental (including energy consumption) and financial aspects of this technology.

- Japanese researchers Anki and Kawamiya state that the SCMagLev "constitutes not only an extraordinarily costly but also an abnormally energy-wasting project, consuming in operation between four and five times as much power as the Tokaido *shinkansen*" (or the Japanese wheel-rail high-speed train) (cited in Harding, 2017, p. 2).

- The proposed SCMagLev technology is not needed to achieve the purported goals of this project. While it is understood that this project is legislatively limited to the SCMagLev train, this does not mean the environmental effects of satisfying future traffic needs by constructing it outweigh improving existing and soon-to-be-implemented rail-wheel capabilities. Maglev and steel-wheeled systems have similar speed achievements. The record speeds attained by the Japanese SCMagLev and the French intercity high-speed rail service (TGV) are comparable, 375 miles-per-hour for the SCMagLev and 357 miles-per-hour for the TGV. At these speeds, most of the energy used is in overcoming air resistance, which is basically the same for the SCMagLev and steel-wheel systems. Restricting consideration to the SCMagLev goes against the spirit of "technology neutrality" described in *Pathways to the Future of Transportation* (USDOT, July 2020; see the introductory letter from Secretary Chao).

(6) Until it reaches a speed of 93 miles-per-hour, the SCMagLev will be a guided rubber-tire bus. This creates a "new" series of safety issues the FRA must assess.

- The FRA needs to develop safety standards to assess the safety of the SCMagLev during its "rubber-tire" operation as the train ramps up to 93 miles-per-hour and the magnetic levitation takes over. These new standards should include specific hardware specifications. The "bogies" (called "trucks" in normal railroad parlance), which are the two separate parts of each vehicle to which the wheels are attached, are extremely complex. Each of the two bogies on each car of the SCMagLev train has four wheels for support, which need to be (1) retracted after leaving each station and the train reaches the "levitation" speed of 93 miles-per-hour and (2) extended before each station is reached as the train slows down to rubber-tire speed of 93 miles-per-hour and less.

- In the event of a loss of power, the rubber wheels will automatically descend (BWRR, November 2018, p. 36). Thus, according to the report, the rubber-tired wheels must be able to safely handle supporting the vehicle at 311 miles-per-hour, as well as the near-instantaneous speed change of the rubber tire and wheel rim from zero to 311 miles-per-hour. This is a more stringent requirement than for tires during commercial aircraft landings.

(7) How will breakdowns of the SCMagLev while between stations be addressed?

- What happens when an SCMagLev train has a mechanical issue that causes it to be stopped between stations? The highly-complex nature of the bogies makes it likely such incidents would be relatively common. What procedures would be used to retrieve the stranded train? How would the safety of other trains on the line be assured while the non-maglev rescue locomotive hauls the disabled train down the guideway to the maintenance area?

(8) Work requiring presence of employees in the guideway.

- Work requiring the presence of employees in the guideway cannot realistically be confined to non-operating hours. Therefore, similar safety regulations to those applicable for all other rail workers are needed.

- Unexpected occurrences include mechanical breakdown of a train, debris blown by wind into the guideway, structural checks for safety after damage to elevated guideways, and problems with guideway switches. To avoid having to take the entire system out of service for such incidents, switches between guideways at intervals along the line are needed to allow “single-tracking,” such as is done on the Washington Metro. For example, what if there is a medical emergency aboard an SCMagLev train while it is in the BWI station? The more hours the SCMagLev system is out of service each day because maintenance is not allowed during operations, the lower its transportation value.

Findings/Conclusion

The serious issues, questions, and concerns about the SCMaglev’s impact, safety, and operation, both for the passengers and for the residents living near and alongside the guideways, continue to mount. This article identifies and explores some of them.

Want to Help?
(1) Share this information with your family, friends, neighbors, and community.
(2) Join our Facebook page: www.facebook.com/groups/CitizensAgainstSCMaglev.
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Sources

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(1) Baltimore-Washington Rapid Rail. "Interface with Other Infrastructure (Roads/Bridges/Rail Systems/Structures)." *Final Alternatives Report*, p. 42. November 2018. https://www.bwmaglev.info/images/document_library/reports/alternatives_report/SCMAGLEV_Alts_Report_Body-Append-A-B-C_Nov2018.pdf. November 2018.
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(6) Technology. https://en.wikipedia.org/wiki/SCMaglev.
(7) U.S. Department of Transportation. *Pathways to the Future of Transportation: A Non-Traditional and Emerging Transportation Technology (NETT) Council Guidance Document*. July 2020. https://www.transportation.gov/sites/dot.gov/files/2020-08/NETT%20Council%20Report%20Digital_Jul2020_508.pdf.

Endnotes:

(1) The "Rule of Particular Applicability" is the process the Federal Railroad Administration goes through for situations where existing safety standards for railroads need to be modified to suit a particular situation. In the case of the SCMagLev, for example, the guideway would need different detail standards than a typical steel-wheeled train's railroad track.

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CATS-MCRT Rpt - The Next Generation of Amtrak Acel

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AMTRAK - Next Generation Acela

By: Dan Woomer
Edited by: Susan McCutchen

January 11, 2021

The Baltimore-Washington Rapid Rail (BWRR) (the project developer) and the Northeast MagLev (TNEM) (the promotional entity) have the short-term goal of obtaining Federal Railroad Administration (FRA) approval to build a magnetic levitation (maglev) train between Baltimore and Washington, DC, with the long-term goal of extending the train operation to New York City by way of Philadelphia. Japan's Superconducting Magnetic Levitation (SCMagLev) train is the high-speed, ground-based transportation system TNEM is promoting to build in the northeast corridor of the United States.

Information about the SCMagLev and BWRR's plans to build and operate the system have raised many questions and concerns. This is one of a series of articles that identifies and discusses some the many questions and concerns citizens and communities have identified with moving forward in building and operating the SCMagLev.

Abstract

The SCMagLev is in the imagination stage, while Amtrak is building and testing its next-generation Acela, scheduled to start operation in 2021. The new Acela trains will be faster and safer, accommodate more passengers and commuters, and provide a better travel experience. The SCMagLev, a highly-expensive, likely tax-dollar subsidized transportation system for the elite, well-heeled traveler is on BWRR's drawing board, while Amtrak's Acela has already received FRA approval to be built and will soon deploy a functional high-speed train system to enhance Amtrak's array of passenger and commuter services in the Northeast Corridor.

About Amtrak

Amtrak currently provides intercity passenger rail service with over 21,000 route-miles of track across 46 states, including the District of Columbia, and Canada. Amtrak's *Acela Express*, *Northeast Regional*, *State Supported*, and *Long-Distance* rail services between Boston, New York, Philadelphia, Baltimore, and Washington, DC, provide an expansive array of services for passengers and commuters. As the majority owner of the Northeast Corridor (NEC), Amtrak provides coordinated passenger and freight rail service planning for the NEC, as well as infrastructure access and operational support to eight commuter rail authorities — including the Maryland Area Regional Commuter (MARC) and the Virginia Railway Express (VRE) — and four freight rail operators. Amtrak's long experience as the U.S. high-speed operator, and the NEC end-to-end user, provides a unique, profound, and expert insight and perspective about the Baltimore-Washington passenger rail transportation network.

Questions & Concerns

(1) While BWRR is still in the early stages of planning for a new train system, where is Amtrak?

- Amtrak plans to replace its popular Acela trains in 2021 with new ones that will hold more people, travel faster, and have improved safety features. The new trains will shave 15-20 minutes off the popular New York City to Washington, DC, route, which

New Acela. WTOP News. Photo Amtrak.

currently takes about three hours. The next-generation Acela will travel at speeds up to 160 miles-per-hour.

- While high-speed rail has struggled to take hold in the United States, Amtrak's new second-generation fast trains are pushing Amtrak toward profitability. CBS News' Kris Van Cleave got a first look at the new Acela being assembled in the United States (as opposed to in Japan for the SCMagLev). Kris Van Cleave traveled to the Hornell factory in western New York, which employs some 800 American employees, to see the new Acela being built and was favorably impressed.[1]

- The future of America's high-speed rail is starting to take shape in the same place where trains have been serviced, built, and rehabbed by American workers since the 1850s. In Mr. Van Cleave's report, he interviews Stanley Hall, a third-generation train builder, who speaks to the pride of building the next generation of Acela here in the United States: "And it's not just my father and grandfather, my brother comes in here and works. I had several cousins that worked here ... when I was first hired, my uncle helped me a lot to get my job here."[2]

- Richard Anderson, the former Delta Airlines CEO who now runs Amtrak, said the new Acela is "incredibly important" to the future of the company. "It really lays out a clear vision for what short haul, inter-city passenger rail transportation can do for this country. And, this country is going to need it in more and more corridors because millennials don't want to drive, and you cannot add enough lane miles for 100 million more people," Anderson said.[3]

- The updated Acela trains will hold about 380 people — 25 percent more passengers than the prior generation — and are designed to tilt as they take turns, allowing them to go faster. Amtrak's most lucrative corridor linking Boston, New York, and Washington, DC, will see a cut in travel time by at least 15 minutes. "We've got to position Amtrak to have a modern product that a millennial wants to get on with high-speed Wi-Fi, craft beers and reliable schedules that beat buses, cars and airplanes," said Mr. Anderson.[4]

- To gain the magnetic lift and speed of the SCMagLev, many of the FRA train standards for strength and crash worthiness have been "adjusted" to incorporate lighter materials. These "adjustments" have the real potential to render the SCMagLev less crashworthy, resulting in far more serious injuries if there is an accident. While BWRR claims the SCMagLev is very safe, so did the German government in certifying their maglev train; that is, until it crashed on September 22, 2006, killing 70 percent of the passengers and injuring the rest, most severely injured. This accident, as well as significant cost overruns and serious building/deployment schedule delays, forced the German government to "pull-the-plug" on their maglev plans after having invested millions and millions of taxpayer dollars into their costly, high-tech folly. (Kemp and Smith, 2007)

- The new Acela trainsets will offer passengers faster Wi-Fi, USB charging in each seat, reading lights, and winged headrests (so no one will fall asleep on your shoulder). And, unlike the airlines, Mr. Anderson promises Amtrak will not shrink your seat.[5]

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[1] Van Cleave, Kris. "Inside Amtrak's next-generation Acela train: 'Wi-Fi, craft beers and reliable schedules." CBS News. June 11, 2019. www.cbsnews.com/news/amtrak-new-acela-trains-first-look/.
[2] Ibid.
[3] Ibid.
[4] Ibid.
[5] Ibid.

- Amtrak is nearly 50 years old. The railroad predicts it is on track to break even for the first time by 2021 when the new Acela will start racing along the Northeast Corridor. Mr. Hall plans to be one of the first passengers. "It's just going to be, you know, just pride. Because I know somewhere on that train that there will be a plaque that says that this was manufactured in Hornell, New York." Mr. Hall said. An American train system, Amtrak is built and maintained by Americans, whose jobs will continue to implement, build, and maintain the upgrades, tracks, stations, facilities, and more. The Acela (and other passenger train systems, like MARC and VRE) will offer affordable travel while improving passenger comfort and safety.[6]

Interior of the new Acela. Photo by Kris Van Cleave.

- To improve their existing rail system, Amtrak continues to replace and upgrade tracks along the Northeast Corridor to accommodate the next generation of Acela trains. These new tracks have also improved the reliability and ride for the low-cost commuter MARC trains. The MARC system carries more than 8 million passengers and commuters each year, and ridership continues to grow. MARC also implemented an upgrade plan and has significantly rebuilt and improved train stations and parking facilities, as well as completed a series of upgrades to both passenger car and locomotive equipment, replacing older equipment with new, more reliable, and more comfortable trainsets.

- Amtrak currently operates 20 Acela trainsets and has ordered 28 new ones, enabling Amtrak to add more service and start reduced travel time non-stops. There is also an excellent potential that the new Acela model could work in other parts of the United States.

Findings/Conclusion

(1) Amtrak's *NEC Future*-related Environmental Impact Statement was the result of a costly four-year study. Regional, state, and federal stakeholders approved Amtrak's recommendations and financial plans to proceed with the enhancement of existing right-of-way, equipment, and facilities.[7]

(2) In contrast with BWRR's expensive drawing-board concept, Amtrak has moved past the planning process, successfully completing the environmental clearance and initial engineering stages, and begun to implement upgrades and start the building, and soon deployment, of the new Acela. Financial commitments, including a $2.5 billion loan from the FRA, are being used to build and deploy the next generation of high-speed trains today, and construct the infrastructure needed to improve high-speed train travel along the Northeast Corridor.[8]

Continued development and support of Amtrak is a far better solution than moving forward with building the SCMagLev transportation system. Amtrak and its options provide a reliable and technically and financially-proven system at a reasonable cost for near- and long-distance rail transportation that accommodates commuters and passengers. After four years of study by the FRA, which involved the significant use of financial

[6] Ibid.
[7] U.S. Department of Transportation and Federal Railroad Administration. *NEC Future: A Rail Invest Plan for the Northeast Corridor*. *Record of Decision*. July 2017. https://www.fra.dot.gov/necfuture/pdfs/rod/rod.pdf. Referred to throughout this white paper.
[8] Ibid.

and human resources, and extensive engagement with stakeholders—the federal government, states, cities, the railroads, and the public—the already-completed, approved, and published *NEC Future* lays out a sound plan and investment approach to address the NEC's current and future needs. This approved plan should remain the blueprint for the future of passenger rail transportation between Baltimore and Washington, DC, as well as for the Northeast Corridor.

The competitive SCMagLev transportation system, by comparison, is inordinately expensive, commercially unproven, and potentially damaging to communities and the environment. There are many unanswered safety issues and large government subsidies (tax dollars) will be required to build and maintain its operation. This transportation system for the elite and well-heeled traveler is not justified and should not be approved.

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(2) Woomer, Dan. "First Look at the Next Generation of Amtrak's Acela." June 13, 2019.

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MARYLAND COALITION FOR RESPONSIBLE TRANSIT

Is the SCMagLev Safe?

By: Dan Woomer
Edited by: Susan McCutchen

January 11, 2021

The Baltimore-Washington Rapid Rail (BWRR) (the project developer) and the Northeast MagLev (TNEM) (the promotional entity) have the short-term goal of obtaining Federal Railroad Administration (FRA) approval to build a magnetic levitation (maglev) train between Baltimore and Washington, DC, with the long-term goal of extending the train operation to New York City by way of Philadelphia. Japan's Superconducting Magnetic Levitation (SCMagLev) train is the high-speed, ground-based transportation system TNEM is promoting to build in the northeast corridor of the United States.

Information about the SCMagLev and BWRR's plans to build and operate the system have raised many questions and concerns. This is one of a series of articles that identifies and discusses some the many questions and concerns citizens and communities have identified with moving forward in building and operating the SCMagLev.

Abstract

This article identifies and discusses questions and concerns about the structural safety standards being used to assure passenger crash survivability and the impact of the SCMagLev operation on the residents living near the guideways. The trial operation of the SCMagLev on the present 26-mile test track in rural Japan, mostly in tunnels, does not fully validate its ability to function safely and reliably in day-to-day, high-frequency service in the urban and suburban environment of the Baltimore-Washington metropolitan area. The German Maglev accident of September 22, 2006, which killed 23 people after the safety of the system had been certified by the German government, should be a cautionary note as this project is considered.

Lathen - German Maglev crash. Photo DPA. 23 May 2008.

Questions & Concerns

(1) How do the structural standards of the SCMagLev compare with US Railcar construction and safety standards?

- The longitudinal strength of the vehicles is an important safety consideration. No reduction should be allowed, compared with what would be required for a wheeled rail vehicle, and perhaps the strength requirements for the SCMagLev should be stricter.

  - The SCMagLev vehicle will be confined within the sidewalls of the guideway. In any collision with another train, objects in the guideway (including maintenance or inspection vehicles), devices at the end of the line, or a damaged guideway, there is no alternative but for the SCMagLev train itself to absorb energy. Steel-wheeled trains can absorb the energy of the collision by jackknifing sideways. For the SCMagLev, the walls of the guideway would prevent jackknifing.

- The entire impact of the incident would either be absorbed by the SCMagLev train being crushed and/or by it buckling in a vertical direction. Buckling in a vertical direction has implications of the vehicle going airborne, possibly leaving the guideway.

- Potential accidents involving guideway switches are another reason vehicle strength should not be lowered from those of wheel-rail vehicles.

(2) What is the risk of the SCMagLev becoming airborne?

- According to the material provided at the scoping and informational meetings, there are no physical barriers in the guideway design to keep the magnetically-levitated vehicle from rising out of the guideway. With the guideway sidewalls restricting air flow, hitting an object that would wedge under the front end of the SCMagLev at high speed and lift it higher into the air could subject the underside of the vehicle to tremendous air pressure that could lift the vehicle out of the guideway, especially if the vehicle is designed with much less weight than a steel-wheeled rail vehicle.

- Are there research and safety reports on the risks of the front end of the SCMagLev accidentally being raised slightly and catching air due to malfunctions in the maglev suspension hardware?

(3) The cross-section of the guideway brings up several issues.

This issue includes:

- Snow accumulation is an issue because it cannot simply be shoved to the sides. The sides may trap objects in the guideway such as wind-blown debris. Debris larger than the space between the vehicle and the guideway would be a serious endangerment to the SCMagLev and the passengers.

- What size object can be tolerated in the guideway?

- What if a fence-jumping deer were to get trapped in the guideway just ahead of a train, with the angle of impact causing the animal to be wedged between the side of the vehicle and the guideway?

- What about a suicidal person?

- Another category of hazard is debris thrown onto the guideway, either from an overhead bridge or simply thrown in from the side of the guideway. What damage would a shopping cart cause? Or a bowling ball or an old lawn mower? Experience by both AMTRAK and MARC in the Baltimore-Washington region has shown these are not just theoretical possibilities.

- How are melting snow and stormwater mitigated as to not further pollute the adjacent community streams and waterways?

(4) Where is the research to show the SCMagLev will not cause human health issues resulting from exposure to the intense electromagnetic radiation?

- The intensity of the electromagnetic radiation emitting from the passage of the SCMagLev varies in complicated patterns not previously tested on humans over the long term. As compared with the German MagLev, the SCMagLev generates a higher level of electromagnetic radiation. BWRR indicated in its November 2018 *Final Alternatives Report* that radiation is so severe that people will not be allowed to be closer than 20 feet from the guideway when underneath it. [(4)]

(5) How limited is the forward view from the SCMagLev?

- It appears from the scoping meetings showing the design and operation of the SCMagLev that an employee will be unable to have a clear view of what is in front of the train. The safety of maintenance workers along the guideway, when handling the train in maintenance and staging yards, or in special situations (such as slow orders), would seem to be hampered without a forward view.

(6) The Federal Railroad Administration (FRA) should provide guideway safety standards for this project, including the following.

- Design tolerances for SCMagLev guideways, including speeds allowed in curves and through turnouts (based in part on the lateral forces able to be resisted), as well as safety parameters for the turnout components, including the alignment tolerances of the moving parts.

- Standards regarding the fixation of hardware on the inner vertical surfaces of the SCMagLev guideway. If such fixtures become loose, they could jam between the vehicle and the side of the guideway, with consequences that would likely compromise the integrity of the passenger compartment at high speed, or bring the train to a high G-force stop, with high-heat or even fire generated by the friction involved between the contacting components. The fixation standard issue would also involve the components of the vehicle that interact with the guideway.

(7) Is the SCMagLev leading face designed to deflect debris?

- The lower part of the front-end shape of the SCMagLev shown in the material provided at the scoping and subsequent informational meetings is not designed to deflect material. Further, its tapered, rounded design would make it more likely that debris would become wedged under or on the sides of the vehicle. As noted previously, such debris could result in a dangerous situation for the SCMagLev and its passengers.

(8) How will routine maintenance be coordinated to avoid a collision with maintenance equipment or personnel?

- Guideway maintenance activities will need to take place during operating periods. For example, what if piece of debris is reported and someone goes out to remove it? That person will need to be inside the guideway and unable to quickly step to the side.

- With larger repairs/maintenance, large equipment will be needed. Again, such equipment and operating personnel will be inside the guideway without the ability to move aside.

(9) How will the SCMagLev steer in an emergency slow-down and stop?

- At speeds of 93 miles-per-hour (150 kilometers-per-hour) or less, the SCMagLev moves along the guideway on rubber wheels. These wheels retract as speed builds [(5)]. During an emergency slow-down and stop at any point on the guideway, what is the ability of the steering (sidewall) components of the SCMagLev to keep the vehicle from contacting the sidewall if the wheels on one side accidentally come down at high speed, causing a turning moment in the vehicle?

Findings/Conclusion

There are many serious issues, questions, and concerns about the safety of the SCMagLev operation, both for the passengers and the residents living near and alongside the guideways. This article identifies and explores some of them.

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Annapolis, MD 21401

January 25, 2021

RE: SB 188 – UNFAVORABLE - State Finance – Prohibited Appropriations – Magnetic Levitation Transportation System

Dear Members of the Budget and Taxation and Education, Health and Environ. Committee:

The Maryland Transportation Builders and Materials Association ("MTBMA") and the Maryland Asphalt Association ("MAA") collectively represent tens of thousands of Marylanders who operate in the areas of transportation construction, production and engineering. Together, for nearly 100 years these organizations have served as the voice of the transportation construction industry. The mission of both MTBMA and MAA is to encourage, develop, and protect the prestige of the transportation construction and materials industry in Maryland by establishing and maintaining respected relationships with federal, state, and local public officials. We proactively work with regulatory agencies and governing bodies to represent the interests of the transportation industry, and also advocate for adequate state and federal funding for Maryland's multimodal transportation system.

The passage of SB188 could put the future of the Northeast Maglev project at risk and we are strongly against this bill. This project is critical to the future of our region's transportation industry and our greater economic development as a region. At a time when unemployment rates are at alarming highs, this project will bring thousands of jobs to the State. Not only would this project transform the transportation system in Maryland, but it will also transform the entire Northeast corridor. This technology creates a mode of transportation that is faster, safer and more efficient than our current rail system. Passing legislation that could impact the future development of this project is damaging for the State and we urge you to consider all the positive benefits a project like this could bring to Maryland.

We thank you for your time and consideration of this bill and we ask that you vote UNFAVORABLE on Senate Bill 188.

Sincerely,

Michael Sakata

Marshall Klinefelter

President & CEO, MTBMA

President, MAA

SB0188--01.27.21--State Finance – Prohibited Appro

Uploaded by: Fry, Donald

Position: UNF

POSITION STATEMENT

TESTIMONY PRESENTED TO THE SENATE BUDGET & TAXATION COMMITTEE

SENATE BILL 188 - STATE FINANCE – PROHIBITED APPROPRIATIONS – MAGNETIC LEVITATION TRANSPORTATION SYSTEM

Sponsor – Senator Pinsky

January 27, 2021

DONALD C. FRY
PRESIDENT & CEO
GREATER BALTIMORE COMMITTEE

Position: Oppose

The Greater Baltimore Committee (GBC) opposes Senate Bill 188, which would prohibit the State or any local jurisdiction from spending any public money on a magnetic levitation (Maglev) transportation system in the State.

Senate Bill 188 is an attempt to make it more difficult or even impossible to achieve the goal of high-speed rail in the Northeast Corridor, particularly between Baltimore and Washington. Rather than taking steps to impede progress, the State should be removing barriers to progress. The GBC endorses the efforts of Baltimore Washington Rapid Rail (BWRR) to help resolve the long-recognized need for high speed in this corridor.

The Northeast Corridor encompasses a population of over 50 million people. Delays on our highways have tripled in the last 30 years. The Baltimore-Washington region now features 52 percent of the worst highway bottlenecks in the country and auto travel is expected to increase by 22 percent by 2040. The Baltimore Washington SCMAGLEV (superconducting magnetic levitation) project would connect two urban centers thereby reducing congestion and expanding opportunities for business growth. This would serve as the first leg of a transformational Northeast Corridor connection.

Meanwhile, our railways are operating on more than 100-year-old infrastructure with alignments not suitable for high-speed travel. Freight and passenger rail share the same tracks. Approximately 75 percent of all weekday commuter rail ridership in the U.S. is on the Northeast Corridor. Rather than taking incremental steps to patch the existing system, it is time for an integrated bold approach to help solve our nation's transportation problems.

Maryland should encourage transportation and infrastructure like the Baltimore-Washington SCMAGLEV to usher the Northeast Corridor into the future and bring the region to the forefront of technology and transportation in the United States.

For the reasons stated above, the Greater Baltimore Committee urges an unfavorable report on Senate Bill 188.

The Greater Baltimore Committee (GBC) is a non-partisan, independent, regional business advocacy organization comprised of hundreds of businesses -- large, medium and small -- educational institutions, nonprofit organizations and foundations located in Anne Arundel, Baltimore, Carroll, Harford, and Howard counties as well as Baltimore City. The GBC is a 66-year-old, private-sector membership organization with a rich legacy of working with government to find solutions to problems that negatively affect our competitiveness and viability.

SB 188_State Finance and Procurement_Prohibted App
Uploaded by: Griffin, Andrew
Position: UNF

MARYLAND
Chamber of Commerce

LEGISLATIVE POSITION:
Unfavorable
Senate Bill 188
State Finance and Procurement-Prohibited Appropriations--
Magnetic Levitation Transportation System
Senate Budget & Taxation Committee

Wednesday, January 27, 2021

Dear Chairman Guzzone and Members of the Committee:

Founded in 1968, the Maryland Chamber of Commerce is the leading voice for business in Maryland. We are a statewide coalition of more than 5,000 members and federated partners, and we work to develop and promote strong public policy that ensures sustained economic recovery and growth for Maryland businesses, employees and families.

Senate Bill 188 would create significant barriers for public and private investment in the construction of a magnetic levitation (maglev) transportation system connecting Washington, D.C., and Baltimore. The legislation would render any maglev project impossible to construct.

The Chamber believes that improved state transportation networks boost economic opportunity, and we work to advance short- and long-term solutions to statewide transit needs. A privately owned maglev line would create jobs, generate new economic activity and transform Maryland into a leader in 21st-century transportation solutions.

Also, increased transit options would dramatically reduce commute times, thereby increasing productivity and unleashing new opportunities for businesses statewide. Enhanced options for Maryland commuters would also lessen the state's carbon footprint by reducing use of state highways.

For these reasons, the Chamber respectfully requests an **unfavorable report** on SB 188.

Senate Bill 188 Response.pdf
Uploaded by: Howard, Brent
Position: UNF

Baltimore County Chamber of Commerce

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Baltimore County Chamber of Commerce

January 25, 2021

Senate Bill 188 - State Finance – Prohibited Appropriations – Magnetic Levitation Transportation System

Position: Unfavorable

Hello,

I am writing on behalf of the Baltimore County Chamber of Commerce to submit our position as unfavorable for Senate Bill 188, the chamber believes that this technology can be transformative for the state of Maryland and this bill creates new obstacles that may inhibit the ability of this technology to be accessible to our state's residents.

Sincerely

Brent Howard

President & CEO

Baltimore County Chamber of Commerce

SB0188 - Greater Bethesda Chamber - UNFAVORABLE.pd
Uploaded by: Italiano, Ginanne
Position: UNF

THE GREATER BETHESDA CHAMBER of COMMERCE
Smart Business, Bright Future
95th ANNIVERSARY

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January 25, 2021
Senator Guy Guzzone
Chair, Senate Budget and Taxation Committee
Maryland State Senate
3 West, Miller Senate Office Building
Annapolis, MD 21401

RE: SB0188 - State Finance – Prohibited Appropriations – Magnetic Levitation - Transportation System

Position: **OPPOSE**

Dear Chairman Guzzone, Vice Chair Rosapepe, and Members of the Committee:

On behalf of our 500-member businesses and more than 45,000 employees in Montgomery County, this statement is in **Opposition to SB0188 - State Finance – Prohibited Appropriations – Magnetic Levitation - Transportation System.** This is a repeat effort from last year's legislative session which came to naught. The MAG LEV concept of a supersonic means of travel along the East Coast is a futuristic dream, however it is not outside of the realm of possibility. This bill seeks to squash its' possibility. To that end, passage of this obstructionist legislation would make a strong statement about Maryland; It seems to say that State leadership is going to ignore innovation even though there is no "ask" for funds from the State to subsidize or develop this project.

We believe the State and particularly our region should be open to any and all ideas that seek to ameliorate our pressing problem of congestion, which threatens our economy's growth on a daily basis. By supporting legislation that obviates the possibility of something as innovative as MAG LEV the message from Maryland says we aren't in the business of solving transportation problems and we appear to look with disdain on private investment in the infrastructure. Let's stop putting up barriers to progress. Our local businesses certainly will not benefit from such a position. Additionally, mega public projects provide substantial jobs and enhancement to the economic health of our business community.

We ask you to please vote UNFAVORABLE on this short-sighted bill which reflects the lack of long-range planning for our community's future and that of the State. Thank you for your consideration of our remarks.

Sincerely,

Allie Williams
President & CEO

SB0188 Patriots Techology Training Center.pdf
Uploaded by: Jones, Thurman
Position: UNF

"Empowering Students Through Technology"
The Bank of America Building • 5800 Martin Luther King Jr. Highway•Seat Pleasant, MD 20743
(301) 925-9350•FAX (301) 925-9352
www.patriots-ttc.org

January 27, 2021

The Honorable Guy Guzzone
Chair, Senate Budget & Taxation Committee
MD General Assembly
3 West
Miller Senate Office Building
Annapolis, MD 21401

RE: **SB0188**State Finance and Procurement - Prohibited Appropriations - Magnetic Levitation Transportation System

POSITION: **OPPOSE**

Dear Chairman Guzzone, Vice Chair Rosapepe, and Members of the Committee:

As President of the Patriots Technology Training Center, I am writing to express our organization's strong opposition to **SB0188.**

For 25 years Patriots' mission has been "*Empowering Students Through Technology*". Our goal is to increase the number of 5th to 12th grade students entering into science, technology, engineering, and mathematics (STEM), ultimately leading to a college education and career paths in these fields. Our various programs, camps, workshops, competitions, conferences, and activities serve to introduce youth to tomorrow's careers.

The Northeast Maglev project represents the pinnacle of opportunity for today's youth. The influx of high tech construction and operations jobs, with stations located in Baltimore, DC, and at BWI, will provide tremendous opportunity for our youth - opportunity to be part of the most advanced transportation system in the world. Once the project is complete, ultimately connecting major metropolitan areas of the Northeast Corridor, today's youth will continue to benefit with easy access to opportunities along the entire route.

We also recognize that a project like this will benefit businesses and people beyond the Baltimore/Washington region. It represents job, business and development opportunities, and community growth for millions along the Northeast Corridor. This project represents a future with less pollution, traffic, and with an emphasis on clean, efficient transportation and transit-oriented development. For the youth we serve, we want to be a part of this future.

SB0188 is a clear attempt to stop this project, and in effect stifle opportunity for today's youth and for future generations for careers, economic development, access, and a cleaner environment.

Please submit an unfavorable report on this nearsighted bill.

Sincerely,

Thurman D. Jones, Jr.,
President

SB 188 State Finance – Prohibited Appropriations –
Uploaded by: McCulloch, Champe
Position: UNF

SB 188
State Finance – Prohibited Appropriations – Magnetic Levitation Transportation System
Senate Budget & Taxation & Education, Health, and Environmental Affairs Committees
Position: Unfavorable

Maryland AGC, the Maryland Chapter of the Associated General Contractors of America, provides professional education, business development, and advocacy for commercial construction companies and vendors, regardless of labor policy. AGC of America is the nation's largest and oldest trade association for the construction industry. AGC of America represents more than 26,000 firms, including over 6,500 of America's leading general contractors, and over 9,000 specialty-contracting firms through a nationwide network of chapters. Maryland AGC members include many contractors who construct transportation systems. Maryland AGC opposes SB 188 and respectfully requests the bill be given an unfavorable report.

This bill prohibits the State (or any unit or instrumentality of the State) from using any appropriation for a magnetic levitation (Maglev) transportation system located or to be located in the State. The bill does not apply to expenditures for the salaries of personnel assigned to review permits or other forms of approval for a Maglev transportation system.

SB 188 effectively prohibits the construction of a Maglev system anywhere in Maryland. The bill does so regardless of the benefits from its construction, including potentially thousands of construction jobs, and the tax revenues Maryland would realize from income and sales taxes. It does so regardless of the benefits of reduced vehicle traffic and associated accidents and exhaust emissions, and reduced or, practically speaking, eliminated rail accidents. It does so regardless of the benefits to both the Baltimore and Washington DC Metropolitan areas of speedy commuting. It does so without any consideration of alternative financing mechanisms, such as a public-private partnership. Indeed, SB 188 does so without any regard for or consideration of the merits of Maglev or the potential for solutions to issues that opponents may have regarding Maglev.

The Federal Railroad Administration (FRA) and the Maryland Department of Transportation (MDOT) are in the process of preparing an Environmental Impact Statement (EIS) to evaluate the potential impacts of constructing and operating a Maglev system between Washington, DC and Baltimore, Maryland with an intermediate stop at BWI Airport. There are 13 alternatives moving forward in the Draft Environmental Impact Statement (DEIS). There is a No-Build alternative and 12 Build Alternatives. SB 188 would ban Maglev regardless of the conclusions of the EIS, including potentially positive impacts in reducing global warming.

Decisions about appropriate transportation modalities should be made based on the expert advice of transportation planners and Federal, State, and county transportation professionals. Public policy considerations are always appropriate, but should be based on a complete understanding of all of the relevant factors, pro and con, not *a priori* conclusions. Essentially SB 188 takes the position "my mind is made up; don't confuse me with the facts." Accordingly, Maryland AGC opposes SB 188 and respectfully requests the bill be given an unfavorable report.

Champe C. McCulloch
McCulloch Government Relations, Inc.
Lobbyist for Maryland AGC

2021 SB188 WLR Testimony Final Version.pdf
Uploaded by: Rogers, Wayne
Position: UNF

BWRR
BALTIMORE-WASHINGTON RAPID RAIL

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Baltimore, MD 21202
(443) 759-8360

Washington Office
1212 New York Ave NW Suite 700
Washington, DC 20005
(202) 499-7933

January 27, 2020

SB188

TESTIMONY OF WAYNE L. ROGERS
BALTIMORE WASHINGTON RAPID RAIL
IN OPPOSITION TO SB188

State Financing and Procurement — Prohibited Appropriations — Magnetic Levitation Transportation System

Chair Guzzone, Vice Chair Rosapepe and Members of the Committee:

I am the Chairman/CEO of Baltimore Washington Rapid Rail, LLC and appear today to convey our strong opposition to SB188.

BWRR is a railroad franchised by the Maryland Public Service Commission to operate a 311 mph Super-Conducting Magnetic Levitation train between Washington and Baltimore. When constructed the train will take passengers between Baltimore and Washington in 15 minutes. Passengers landing at BWI would be able to reach downtown Baltimore in 5 minutes and downtown DC in 8 minutes. In granting the railroad franchise, after notice and public hearing, the Maryland PSC found that "***the construction and operation of the SCMAGLEV between Baltimore and Washington, DC will result in substantial economic and social benefits to Baltimore and the State of Maryland and will be consistent with the State's environmental laws and policies to reduce harmful emissions for cleaner air and address the causes of climate change and that awarding a franchise to facilitate in development of the SCMAGLEV was in the public convenience and necessity."***

The SCMAGLEV project will bring significant benefits to the State of Maryland, including those in central Maryland where 70% of Maryland residents live. The project will create over 74,000 Maryland jobs (205,000 nationally), result in a $6.5 billion GDP increase in Maryland from construction ($268 million annually from operations), improve BWI Airport and transform the lives of tens of millions of people. It is the equivalent of building an eight-lane highway, with the exception that our project will take people *off* the roads and *reduce* regional greenhouse gas emissions. The Project will divert millions of cars from overcrowded highways to public transit. Over seventy percent of the alignment is underground, with no need for residential takings. Floating on air at 311 mph the proposed project represents a huge environmental and economic opportunity for Maryland.

The project has been undergoing environmental and permitting review by over 30 federal, state and local agencies for 4.5 years The Draft Environmental Impact Statement was released on January 15, 2021. This milestone begins a 90-day formal public comment period, which is on the heels of over 200 public meetings, hearings and briefings over the last 4 years. We are committed to ensure **any issues identified within the DEIS, or raised during the public comment period, are addressed in the best way possible for communities and the environment**.

SB188 proposes to prohibit any appropriations from being used by the State or any unit or instrumentality of the State for a Magnetic Levitation system in the State.

No appropriations have been requested for this Project.

Passing a bill prohibiting appropriations not even requested, is not only bad public policy but sends a negative signal that the State of Maryland is not willing to pursue remedies to the issues of traffic congestion, poor air quality and climate change. Prior to COVID we had the worst congestion in the country and studies show that left unchecked it will continue to worsen.

Right now each Marylander spends 102 extra hours per year stuck in traffic, with congestion costing the economy $4.6 billion per year and each individual over $2000. I am sure that each of your constituents could use an extra $2000 per year and 102 hours of time to put to better use.

The State is and will be spending millions to combat climate change. It is imperative we join together to find and implement solutions, not try to prevent them.

We as citizens and, respectfully, you as elected officials should not profess to support actions to combat climate change, reduce congestion, and to improve the health and lives of our citizens, while simultaneously fighting any effort to do so.

This bill would signal that years of work by federal, state and local agencies and over $100 million of investment by the private sector, is not supported, all before final decisions on financing and construction are made. In addition, millions of federal dollars, money that is earmarked only for Magnetic Levitation projects, not other things, have been awarded to the State of Maryland for the purpose of studying and implementing this technology. In fact, this money is already paying the salaries of many tax-paying Marylanders. Maryland won a federal national competition of over 14 states to host this project. It is the opportunity of not only a lifetime, but generations.

For these reasons Baltimore-Washington Rapid Rail **strongly opposes SB188** and urges the committee to submit an **unfavorable report**. Thank you for the opportunity to appear.

MAG LEV SMTA.pdf
Uploaded by: Russel, Jennifer
Position: UNF

The Suburban Maryland Transportation Alliance (SMTA) wishes to voice its opposition to SB0188, the bill which prohibits the State and certain units and instrumentalities of the State from using any appropriation for a magnetic levitation transportation system in the State. SMTA believes all possibilities related to potential transportation infrastructure should be pursued for a region that is choking in its congestion. While the "dream" of a MAG LEV may seem futuristic, the idea of promoting a bill that would completely doom a project that has the potential of positive enhancements for our region and the Eastern seaboard beyond is truly narrow-minded. SMTA has always prided itself as being the advocate for both roads and transit in a geographic area that often finds proponents of each pitted against one another. We have always maintained that in order to improve congestion and thusly the quality of life in our region, all forms of transportation improvements are desperately needed.

There is no request for State funds within the scope of this bill, and any financial commitment by the State of Maryland would be left in the future to State decision-makers. This is a project with possibilities, primarily transportation oriented as well as economic development focused. Many jobs could be created in the future, a concept from which our post-pandemic economy would certainly benefit. By supporting this obstructionist bill, Maryland announces its fear of innovation and its distrust of private investment in infrastructure. Certainly not the preferred message for our future generations. Given the lack of public funding available for such megaprojects, where would we go from here with such a narrow-minded approach? We urge you to oppose this bill which creates the image that Maryland is not seeking economic progress.