Key Maglev Facts and Figures

What is Maglev?

- Maglev is short for a Super Conducting Magnetic Levitation Train
- This is a proposed ~40-mile train from Baltimore, MD to Washington DC
    - ~75% of the train would be in deep tunnels underground, with the remaining 25% on aboveground viaducts
- Maglev trains can travel at speeds up to 300+ mph, and The Northeast Maglev claims commuters will be able to get between Washington and Baltimore in 15 minutes
- The project will cost $12+ billion to build
- Project proponents would like to eventually run the train to New York City and then Boston although these municipalities have not indicated they want or need the Maglev

Public Lands and Green Space

- The project could permanently impact up to 328 acres of federal property (Table ES4.3-3)[1]
    - The Beltsville Agricultural Research Center (BARC) owned by USDA- 187.4 acres
    - Baltimore-Washington Parkway owned by NPS- 88.9 acres
    - Patuxent Wildlife Research Refuge owned by USFWS- 24 acres
    - NASA Goddard Space Flight Center- 24.5 acres
    - Fort Meade owned by the US Army- 43.3 acres
    - Other properties owned by the NSA and Secret Service- up to 7.2 acres
- The project would destroy up to 451 acres of forests, including up to 42 acres of the Greenbelt Forest Preserve (Table ES4.3-1 and Table 4.7-1)
- In total, up to 140.5 acres of recreational facilities and parklands could be impacted (Table ES4.3-1)
- Extensive impacts to "The Green Wedge," a 20,000+ acre green oasis in between Washington D.C. and Baltimore

Waterways and the Chesapeake Bay

- Negative impacts to 8 sub-watersheds, all in the Chesapeake Bay Watershed- Anacostia River, Patuxent River Upper, Little Patuxent River, Severn River, Patapsco River Lower North Branch, Baltimore Harbor, Gwynns Falls, and Jones Falls (Table 4.10-1)
- Potential disruption of underground aquifers and wetlands from tunneling
- Trainset Maintenance Facility would add 200 acres of new impervious surface causing the Anacostia and the Little Patuxent Watersheds to "experience a change in watershed function" such as "their ability to filter and store water in the soil" (Page 4.10-15)
- In total, up to 76 acres of floodplain, 51 acres of wetlands, 124 acres of Chesapeake Bay Critical Area, and 12,896 linear feet of waterways all negatively impacted (Table ES4.3-1)

[1] To find the tables and pages referenced throughout this factsheet, see "Draft Environmental Impact Statement and Draft Section 4(f) Evaluation- BALTIMORE-WASHINGTON SUPERCONDUCTING MAGLEV PROJECT"

Clean Air and Climate Change

- Despite claims of the project developers, the project would actually increase annual net transportation energy consumption by up to 39% by 2045 compared to the no-build option (Table 4.19-7)
    - This is an increase in 3.07 Trillion BTUs, enough energy to power 88,900 homes (Page 4.19-11)
- While Maglev is "25 percent more efficient than auto travel," it is "37 and 20 percent less efficient than existing bus and passenger rail, respectively" (Page 4.19-10)
- Maglev operation would increase net CO2 emissions by 286 to 336 million kilograms per year relative to the No Build option (Dr. Owen Kelley, Greenbelt Online)

Impacts to Existing Transit

- It is expected that the Maglev will poach roughly 32% of annual MARC riders on the Penn and Camden lines (over 2.4 million riders) and 94% of annual Amtrak riders between Penn and Union Stations (over 332,000 riders) (Page 4.2-10, 4.2-12)
- Amtrak has said that the Northeast Corridor Future Plan already analyzed passenger rail needs between Baltimore and Washington and Maglev was not identified as a priority. Significant public and private investments have already been used, secured, or planned to improve the existing infrastructure in the Northeast Corridor (Final Scoping Report, Page 26)

Environmental Justice

- Minority populations comprise 69.6% of the total population, and low-income populations make up 12.7% of the Maglev Project Affected Environment. There will be both permanent, long term as well as shorter term impacts from the Maglev Build Alternatives on Environmental Justice (EJ) populations (Table 4.5-2)
- Low-income populations and Black and Latinx minorities are at a higher risk of direct and disproportionate impacts of the construction of this project. The construction of and the associated construction staging and laydown areas and haul routes for the Maglev Project would predominately occur within Environmental Justice population areas (Page 4.5-19)
- The vent systems needed to release compressed air from the tunnel are located in EJ communities
- 80% of the parcels that would be impacted by land use conversion, rezoning, and property acquisitions are in EJ communities (Page 4.5-16)
- The entirety of the viaduct and viaduct ramp locations would be in or adjacent to EJ population areas which would experience the construction impacts from these segments (Page 4.5-20)
- EJ communities have not properly been consulted nor made part of the process and there are huge gaps of research on how the project will impact them directly in the DEIS

Cost

- At an estimated $12 billion, and a project length of about 40 miles, Maglev costs at least $300 million per mile to construct

    - Maglev costs five times more per mile than that traditional high-speed rail. That cost does not include the cost of the extensive tunneling envisioned in the current Maglev plan (Baltimore Sun)
- The expected average fare for a Maglev trip between Baltimore and Washington would be $60 per one-way trip (Page 4.6-13). Ticket cost would be about 7 times higher than an existing MARC ticket for the same trip
    - The cost of the Maglev system would be prohibitive for some, notably low-income populations in EJ areas near stations

For more information contact:

Kyle Hart- Field Representative, Mid-Atlantic Region

khart@npca.org

202-400-1193

April 28, 2021