

MEMORANDUM

TO: City Council

FROM: Alfred D. Lott
City Manager

SUBJECT: ***Status Report***

DATE: April 13, 2017

Status Report

1. Baltimore Washington Super Conducting MAGLEV Project (SCMAGLEV) Update
The various transportation entities involved in the initial planning of a possible superconducting magnetic levitation transportation system for this region held a public information session on April 5, 2017 here in Bowie, which staff attended.

Staff has requested an official who is knowledgeable about the SCMAGLEV project to come and brief the City Council. We will schedule that briefing once we receive a reply from the officials we met at the public session.

Included with this report are several printed documents.

1. SCMAGLEV – How It Works (*a handout from the April 5 session*)
2. Baltimore-Washington Superconducting Maglev – Environmental Benefits (*a handout from the April 5 session*)
3. Maryland Public Service Commission Proposed Order for Case No. 9363 makes final Order No. 87248
4. Maryland Public Service Commission Corrected Attachment A to Case No. 9363 Proposed Order -- adding Anne Arundel County to a list of locations describing the route of the WBA
5. Maryland Public Service Commission Order No. 87248 - this October 2015 order transfers the franchise for the Washington, Baltimore and Annapolis Electric Railroad Company to Baltimore Washington Rapid Rail, LLC.

An extract from the set of poster boards used at the April 5, 2017 meeting to provide information to the session attendees. All of the poster boards can be seen in attachment 6

or here: <http://baltimorewashingtonscmaglevproject.com/index.php/project-documents/public-meeting-materials>

2. Economic Development Committee (EDC)

The EDC held their regular meeting Wednesday and received an update briefing about Melford residential development from Andrew Roud with St. John Properties. The next regular meeting of the EDC will be held in conjunction with the annual Business Recognition Awards Breakfast on May 10th.

3. Contract Street Tree Planting – EAB Program

The adopted fiscal year 2017 budget has allocated \$200,000 towards contract tree removal, stump removal and replacement tree planting within the City rights-of-way and facilities. In fiscal year 2016, the City piggybacked on an existing Montgomery County contract with Ashton Manor Environmental, Inc. with satisfactory results. That contract has been renewed as #1040207 for "Tree Planting and Landscaping Services". In the spring of 2017, Ashton Manor will plant and maintain 75 new street trees for \$27,597 for the City of Bowie. All terms and conditions of the previous contract remain in place.

As provided by Section 62 of the City Charter, this will serve as the required seven (7) day notice of intent to issue a purchase order to Ashton Manor Environmental, Inc. in the amount of \$27,597 for these services.

4. Earth Day Weekend

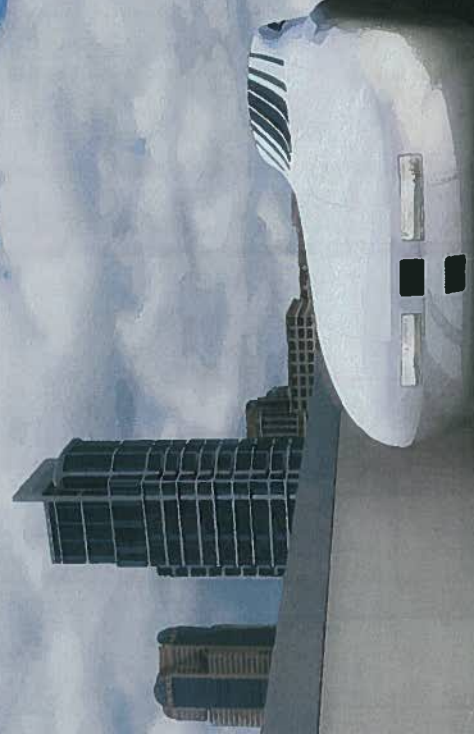
On Friday, April 21st at the BCPA, 7 p.m., Dr. Doug Tallamy will present about how homeowners and communities can landscape with and for nature. The event is hosted by the Prince George's Soil Conservation District, Bowie-Crofton Garden Club, and City of Bowie Environmental Advisory Committee. Register at www.dougallamytalk.eventbrite.com. On Saturday, April 22nd at the BCPA, 7 p.m., Bowie's Green Team will host their 3rd Annual Earth Day Concert & Art Exhibit. Admission is free so that all may enjoy. The theme of the night is "Best of Bowie" in honor of the City's Centennial year. Live musical performances by Tulip Grove Elementary School Choir, Suzuki Cello Studio, The Family, The Bulldog Funk Band, and Duns & Drummer. Artwork by the Bowie High School Green Team, Robotics Club, and Art Club, Samuel Ogle Middle School students, Tall Oaks Vocational High School students, and Krista Setera Photography. No tickets are required, but register at www.bowieearthday.eventbrite.com.

Attachments

ADL/adf

THE WORLD'S FASTEST TRAIN SCMAGLEV

— How It Works —



BWRR
BALTIMORE-WASHINGTON RAPID RAIL



Baltimore-Washington Rapid Rail, LLC (BWRR) is a Maryland-based, 100% US-owned company formed to develop the Superconducting Maglev project.

BWRR works closely with its affiliates The Northeast Maglev (TNEM) and the Central Japan Railway Company (JR Central) to promote the implementation of SCMAGLEV technology in the Northeast Corridor.

Baltimore Headquarters	Annapolis Office	Washington Office
6 South Gay St	191 Main St	1212 New York Ave NW #700
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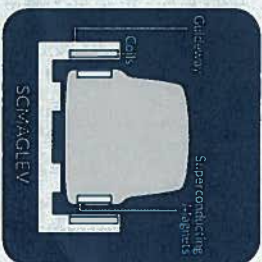
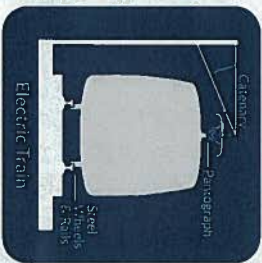
WHAT IS THE SCMAGLEV?



The Superconducting Maglev (SCMAGLEV) is the latest advancement in the world of high-speed ground transportation. This revolutionary system is not your typical train. In development since 1962, the SCMAGLEV is a futuristic magnetic levitation system that uses powerful magnetic forces for all aspects of operation—acceleration, deceleration, guidance and levitation—resulting in operating speeds of over 300 miles per hour in everyday service, and travel times unlike anything traditional trains can achieve.

THE GUIDEWAY

Rather than riding directly on standard steel railroad tracks, SCMAGLEV trains levitate between the walls of a unique concrete structure known as a guideway. The U-shaped guideway has walls surrounding the trains on both sides, making the system free from derailment.



SUPERCONDUCTING MAGNETS AND GUIDEWAY COILS

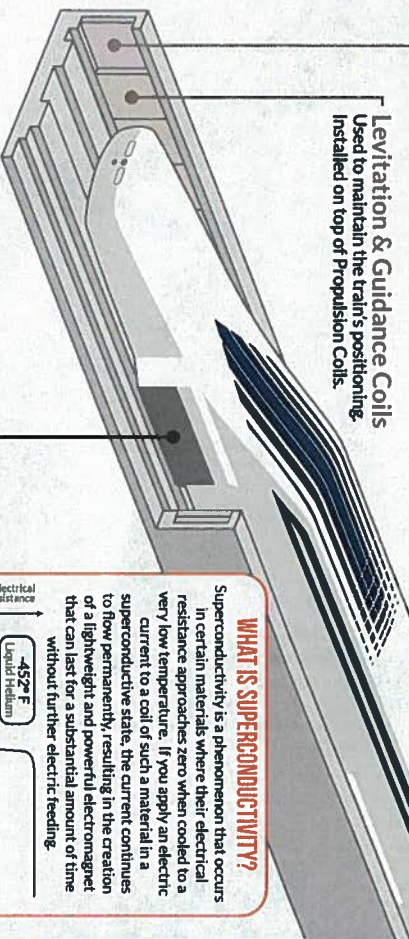
The keys to the SCMAGLEV system's high speed and acceleration are the magnetic forces acting between powerful superconducting magnets located on board the trains and two sets of coils that are installed in the walls of the guideway.

Propulsion Coils

Used for the train's acceleration.
Directly linked to power substations.

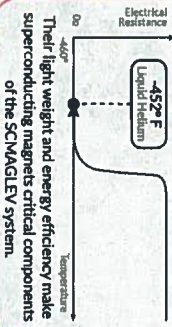
Levitation & Guidance Coils

Used to maintain the train's positioning.
Installed on top of Propulsion Coils.



WHAT IS SUPERCONDUCTIVITY?

Superconductivity is a phenomenon that occurs in certain materials where their electrical resistance approaches zero when cooled to a very low temperature. If you apply an electric current to a coil of such a material in a superconductive state, the current continues to flow permanently, resulting in the creation of a lightweight and powerful electromagnet that can last for a substantial amount of time without further electric feeding.

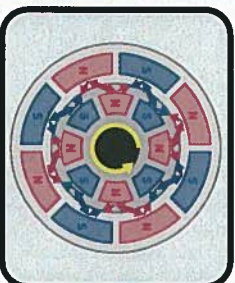


Superconducting Magnets
Strong magnets installed into bogies of each train car. Powerful magnetic forces are generated between the Superconducting Magnets and the guideway coils.

HOW DOES IT WORK?

LINEAR MOTOR PROPULSION

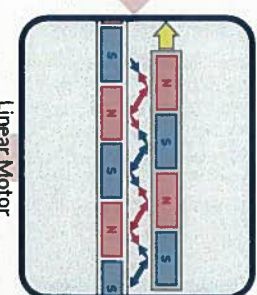
Conventional electric motors contain moving parts (rotor) and stationary parts (stator). When electrified by an alternating current, the stator generates a magnetic field with alternating poles. Because the rotor contains magnets with fixed poles, attracting and repelling forces are generated between the stator and the rotor. Those forces cause the rotor to spin continuously around its axis for as long as power is supplied.



Conventional Motor



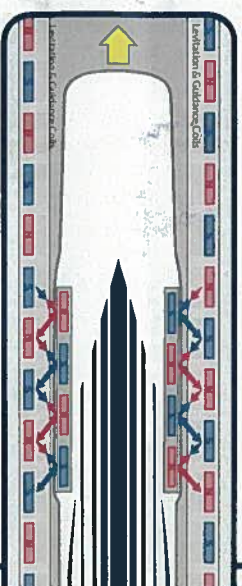
Attracting Forces
Repelling Forces



Linear Motor

The SCMAGLEV system utilizes a linear motor for propulsion. A linear motor resembles a conventional motor that has been split open and laid out in a line extending down the length of the guideway.

Just like a conventional motor, the SCMAGLEV's linear motor is made up of moving parts (Superconducting Magnets on the trains) and stationary parts (Propulsion Coils), but when current is applied, the train is propelled along the guideway, rather than spinning on an axis.

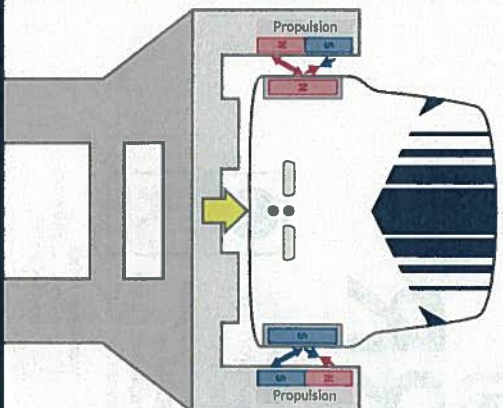


LEVITATION AND GUIDANCE

SCMAGLEV trains begin by traveling on tires as they are accelerated by Propulsion Coils. Once the train hits a sufficient speed and retracts its tires, an induced electric current begins to flow inside the levitation & guidance coils in the guideway walls, causing them to become electromagnets.

This generates magnetic forces between the coils and Superconducting Magnets, causing the train to levitate inches off of the guideway floor. When levitating, the train makes no physical contact with the guideway.

The combined forces from these coils on both sides of the guideway also naturally maintain the train's horizontal positioning, ensuring that it remains centered between the guideway walls without the need for active control.



Baltimore-Washington

Superconducting Maglev



Environmental Benefits

Yearly reduction of air emissions associated with decreased vehicle miles traveled (VMT)

2,000,000

TONS
Greenhouse
Gases



76,000

TONS
Carbon
Monoxide



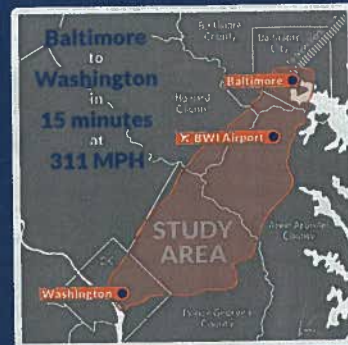
15,000

TONS
Nitrogen
Oxides



4,000

TONS
VOCs



Our Vision: DC to New York in One Hour

Economic Benefits



NATIONWIDE



MARYLAND



BALTIMORE



WASHINGTON DC

Job Creation

205,000

from construction

+14,600 ANNUALLY
after opening

74,000

from construction

+1,500 ANNUALLY
after opening

6,400

from construction

+1,500 ANNUALLY
after opening

3,000

from construction

+2,500 ANNUALLY
after opening

GDP Increase

\$22.5 BILLION

from construction

+\$594 MILLION ANNUALLY
after opening

\$6.5 BILLION

from construction

+\$268 MILLION ANNUALLY
after opening

\$560 MILLION

from construction

+\$166 MILLION ANNUALLY
after opening

\$300 MILLION

from construction

+\$24 MILLION ANNUALLY
after opening

Who We Are



Baltimore-Washington Rapid Rail, LLC (BWRR) is a Maryland-based, 100% US-owned company formed to develop the Superconducting Maglev project.

BWRR works closely with its affiliates The Northeast Maglev (TNEM) and the Central Japan Railway Company (JR Central) to promote the implementation of SCMAGLEV technology in the Northeast Corridor.



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Environmental Review Process

The Federal Railroad Administration is partnering with the Maryland Department of Transportation to complete an Environmental Impact Statement (EIS) for the Baltimore-Washington SCMAGLEV Project. The EIS will analyze possible routes, station and support facility locations, and potential environmental impacts.



The EIS Team invites the public to learn more and provide feedback during outreach meetings along the Baltimore-Washington corridor. For more information on the project and these meetings, please visit

BaltimoreWashingtonSCMAGLEVproject.com

EIS Team



Federal Railroad Administration
Joint Lead Agency
fra.dot.gov



Maryland Department of Transportation
Joint Lead Agency
mdot.maryland.gov



Maryland Transit Administration
EIS Lead
mta.maryland.gov



AECOM
Independent
EIS Consultant
aecom.com

November 16, 2015

In the matter of the application
of Baltimore Washington Rapid
Rail, LLC for approval to trans-
fer passenger railroad franchise

*
*
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Case No. 9363

Deborah E. Jennings, Esq.
Paul A. Tiburzi, Esq.
Andrew Schatz, Esq.
DLA Piper LLP (US)
100 Light Street, 13th Floor
Baltimore, MD 21202-6806

Leslie M. Romine, Esq.
Lloyd J. Spivak, Esq.
Annette B. Garofalo, Esq.
Office of Staff Counsel
Maryland Public Service Commission
William Donald Schaefer Tower
6 St. Paul Street
Baltimore, MD 21202-6806

Dear Counsel:

The Proposed Order of Public Utility Law Judge filed in the above-entitled matter on October 14, 2015, was not appealed by any party, nor has the Commission modified or reversed the Proposed Order or initiated further proceedings into this matter. Therefore, on November 15, 2015 the Proposed Order became a final order of the Commission, and today it was assigned Order No. 87248.

Very truly yours,

Leatrice Williams
Administrative Aide

lw

cc: Paula M. Carmody, People's Counsel

CORRECTED

**ATTACHMENT A
CASE NO. 9363
PROPOSED ORDER OF PUBLIC UTILITY LAW JUDGE**

1. The transfer of the franchise is for the development and operation of the proposed superconducting levitation train ("SCMAGLEV").
2. Applicants shall notify the executive and county council (or equivalent) of each county and Baltimore City, through which it will pass, by letter advising them of each public hearing related to the project to be held by the Federal Railroad Administration and Surface Transportation Board or other government agency. Notwithstanding Federal law regarding jurisdiction over the construction of railroads, the Commission's grant of authority to exercise the franchise formerly held by the Washington, Baltimore, and Annapolis Railroad is contingent upon the written agreement of Baltimore Washington Rapid Rail, LLC ("BWRR") to seek the consent of the Mayor and City Council of Baltimore City, as specified in the franchise as granted by the Maryland General Assembly, and consistent with Maryland Public Utilities Article ("PUA") §§5-407 and 9-303(d).
3. Authorizing the transfer of the right to exercise the franchise does not convey the right of eminent domain broader than defined in PUA §§1-101(y) and 9-303. Within the limits described by these provisions, property obtained in accordance with their requirements may also accommodate collateral uses, including by way of illustration but not limitation, construction in the air rights above a railroad station or combining parking with maintenance facilities, etc., if otherwise allowed by law.
4. Applicants shall be required to file an informal status report and an updated schedule of milestones with the Commission every two years during construction through commencement of operations, dating from the date of final approval of the order granting the right to exercise the franchise.
5. The future transfer or sale of the right to exercise the franchise authorized in this proceeding to any affiliate or other third party is subject to approval by the Maryland Public Service Commission.
6. In the event that the Surface Transportation Board and the FRA do not exercise jurisdiction over the project, the Commission may exercise jurisdiction.
7. Construction must start within five years of final federal approval. In the event construction is delayed, Applicant may seek an extension of this period upon showing reasonable progress. The Applicant is directed to notify the Commission, in writing, 30 days after construction has begun.
8. Authorizing the transfer of the franchise in this proceeding does not preclude PSC participation on non-franchise issues in other regulatory proceedings by either the federal government or the District of Columbia. The Applicants shall provide the Commission with copies of all documents the Applicants file in any such proceedings.

CORRECTED

9. The project agrees to operate and maintain the SCMAGLEV system in a manner to promote public safety so as to minimize the risk of an event such as the recent Amtrak accident between Philadelphia and Trenton, with due consideration to the latest technology and safety processes.
10. Prior to commencement of operations, BWRR shall provide sufficient funding up to \$50,000 to each County and Baltimore City through which the SCMAGLEV passes, for training local EMS for evacuation, rescue and planning on an SCMAGLEV. BWRR shall provide a copy of its emergency response plan to each such County and Baltimore City and shall endeavor to invite local EMS personnel to participate in in-house training programs for evacuation and rescue. BWRR shall also participate with, and extend full cooperation to, the State of Maryland in all government-initiated cybersecurity exercises.
11. BWRR shall brief the Commission every five years regarding construction and operation of the SCMAGLEV, and shall brief the Commission and any other Maryland state agency upon the agency's request.
12. The authority to exercise the Washington, Baltimore and Annapolis Electric Railroad Company ("WBA") franchise is limited to the Main Line portion of the franchise, which is defined as a line that has a termini on the eastern boundary of the District of Columbia/Maryland and a termini in Baltimore City and passing through the Prince George's, **Anne Arundel**, and Baltimore Counties and Baltimore City. Authority to exercise the franchise between other termini specified in the franchise or in other counties must be sought under separate application.
13. All conditions the Commission imposes on the authorization to exercise the previously abandoned franchise of the WBA shall apply to any successors to BWRR in the same manner as to BWRR, unless the successor is explicitly relieved of the obligation to comply by order of the Commission.

ORDER NO. 87248

IN THE MATTER OF THE APPLICATION * BEFORE THE
OF BALTIMORE WASHINGTON RAPID PUBLIC SERVICE COMMISSION
RAIL, LLC FOR APPROVAL TO TRANS- * OF MARYLAND
FER PASSENGER RAILROAD FRANCHISE

*

*

CASE NO. 9363

Issued: October 14, 2015

PROPOSED ORDER OF PUBLIC UTILITY LAW JUDGE

Appearances:

Deborah E. Jennings, Esquire, on behalf of Baltimore
Washington Rapid Rail, LLC.

Lloyd J. Spivak, Esquire, on behalf of the Technical
Staff of the Maryland Public Service Commission.

Procedural Background

On September 3, 2014, Baltimore Washington Rapid
Rail, LLC ("BWRR") submitted to the Maryland Public Service
Commission ("Commission") an application requesting the Commission
transfer to BWRR the legislatively created railroad franchise
abandoned by the Washington, Baltimore and Annapolis Electric
Railroad Company ("WBA") ("Application")¹ and then grant BWRR the

¹ BWRR Exhibit ("Ex.") 5, Application for Approval to Transfer Passenger
Railroad Franchise, including Ex. A, Nos. 1-9 (History of the Washington,
Baltimore and Annapolis Electric Railroad Company), Ex. B (Required
Information for the Transfer of an Abandoned Railroad Franchise and
Attachment - Articles of Incorporation).

authority to exercise the franchise ("WBA Franchise" or "Franchise").

On September 23, 2014, the Commission issued a Notice seeking comments on the Application and inviting alternative applications seeking transfer of the WBA Franchise to be filed. During the 90-day period provided in the Notice, the Commission received a multitude of comments supporting the transfer of the WBA Franchise to BWRR,² but no alternative applications. Technical Staff of the Commission ("Staff") also filed comments, in which it questioned whether, based on its interpretation of the statute and case law, the Commission has the authority to grant BWRR's request. In any event, it recommended an evidentiary proceeding be conducted to have a record on which to determine whether granting the Application would serve the public convenience and necessity. Based on Staff's recommendations, the Commission delegated the matter to the Public Utility Law Judge Division.

On April 17, 2015, BWRR submitted the Direct Testimony of Wayne L. Rogers, Chairman of BWRR,³ and the Direct Testimony of Albert Racciatti, Vice President of The Louis Berger Group, Inc.⁴ On June 30, 2015, BWRR submitted the Rebuttal Testimony of Mr. Rogers⁵ and the Rebuttal Testimony of Mr. Racciatti.⁶

² BWRR Ex. 6, Compilation of Letters of Support, December 2014.

³ BWRR Ex. 7, Direct Testimony of Wayne L. Rogers dated April 17, 2015, including Ex. A ("Rogers Direct").

⁴ BWRR Ex. 9, Direct Testimony of Albert Racciatti dated April 17, 2015, including Ex. A - B ("Racciatti Direct").

⁵ BWRR Ex. 8, Rebuttal Testimony of Wayne L. Rogers, including Ex. A - C ("Rogers Rebuttal").

⁶ BWRR Ex. 10, Rebuttal Testimony of Albert Racciatti, including Ex. A ("Racciatti Rebuttal")

On June 19, 2015, Staff filed the Direct Testimony and Exhibits of Craig Taborsky, Assistant Chief Engineer of the Commission's Engineering Division,⁷ and the Direct Testimony and Exhibits of Dr. C. Shelley Norman employed in the Commission's Electricity Division.⁸

On July 9, 2015, an evidentiary hearing was held for the cross-examination of BWRR's witnesses and Staff's witnesses. At the conclusion of the evidentiary hearing, Staff advised that the parties had begun negotiations towards resolving the matter through a settlement agreement. Accordingly, the previously adopted procedural schedule was suspended, and the parties were directed, within two weeks after the evidentiary hearing adjourned, to either submit an executed settlement agreement along with pre-filed testimony in support of the agreement or to provide an update on any additional time needed for negotiations.

On July 17, 2015, Staff submitted revised conditions, Exhibit CSN-1 to its witness Norman's testimony, to incorporate into any grant of the transfer and exercise of the franchise to BWRR. It also stated that BWRR and Staff had been unable to come to a settlement agreement and requested the procedural schedule be reinstated. On July 20, 2015, the procedural schedule was reinstated.

On August 17, 2015, BWRR and Staff each filed its brief.

⁷ Staff Ex. 5, Direct Testimony and Exhibits of Craig Taborsky dated June 19, 2015 ("Taborsky Direct").

⁸ Staff Ex. 7 (Public Version) and 7C (Confidential Version), Direct Testimony and Exhibits of C. Shelley Norman, Ph.D., dated June 19, 2015 ("Norman Direct").

Overview of Proposed BWRR Project

According to its Application and the testimony of Mr. Rogers, BWRR is proposing to construct and operate a superconducting levitation train ("SCMAGLEV") to run from Washington, DC to Baltimore, Maryland and then ultimately along the Northeast Corridor of the United States.⁹ Mr. Rogers testified that the SCMAGLEV is able to travel at a speed of 311 miles per hour ("mph");¹⁰ therefore, a SCMAGLEV trip from Washington, DC to Baltimore Washington International ("BWI") Thurgood Marshall Airport would take about 8 minutes or from Washington, DC to Baltimore City, about 15 minutes.¹¹ He explained that a SCMAGLEV with a route of approximately 26 miles has been operating in Japan on a test basis for 18 years and has recently begun commercial operations.¹²

Although the SCMAGLEV is an elevated train, Mr. Rogers explained that a large percentage of the railway in Maryland will be underground, *i.e.*, in a tunnel, and there will be no road crossings.¹³ According to Mr. Rogers, the SCMAGLEV runs in a shaped concrete guide way, and, within the guide ways are coils for guidance and propulsion of the train, which are powered by electricity.¹⁴ When the train begins moving, Mr. Rogers said that it will sit on rubber wheels, and when it has accelerated to

⁹ Application at 1; Rogers Direct at 3.

¹⁰ Rogers Direct at 4; Transcript of evidentiary hearing held July 9, 2015 ("TR") at 15.

¹¹ Rogers Direct at 4; TR at 15, 16, 62, 63.

¹² TR at 17, 19, 23.

¹³ TR at 17, 18, 21.

¹⁴ TR at 126.

approximately 70 mph, the wheels go up like an airplane and it floats on the air (due to the magnetic conduction).¹⁵

Mr. Rogers estimated the cost of constructing the approximate 40-mile route from Washington, DC to Baltimore ("DC-Baltimore segment") to be approximately \$10 billion.¹⁶ Currently, BWRR has no firm commitments for financing the costs of construction. Mr. Rogers indicated that Japan has indicated that it will finance 50% of the construction costs associated with the DC-Baltimore segment; however, he stressed that such financing was not a firm commitment at this time.¹⁷ Mr. Rogers also indicated that BWRR would apply for federal funding through the Railroad Rehabilitation & Improvement Fund, which he indicated had more than enough funds appropriated to cover the costs associated with the initial leg of the SCMAGLEV.¹⁸

Additionally, Mr. Rogers noted that the Central Japan Railway Company has agreed to transfer the SCMAGLEV technology to BWRR without any licensing fees.¹⁹ He expected that it will take approximately seven years to construct the DC-Baltimore segment of the SCMAGLEV.²⁰ Further, he expects that, based on the estimated costs, a one-way ticket on the DC-Baltimore segment will be \$1-\$2 per mile (or \$40-\$80).²¹

¹⁵ *Id.*

¹⁶ TR at 49.

¹⁷ TR at 50-51.

¹⁸ TR at 54.

¹⁹ Application at 2.

²⁰ TR at 34, 38-39.

²¹ TR at 48.

Authorizations and Approvals Requested from Commission

BWRR asks the Commission to transfer a franchise that, among other things, includes the right to construct and operate a rail line from the eastern boundary of Maryland and the District of Columbia to Baltimore City ("WBA Main Line"), which was granted by the Maryland General Assembly to the now defunct WBA. As set forth in the Application, the WBA franchise, as it existed in 1935, was created through a number of mergers and reorganizations of railroad companies incorporated pursuant to the Maryland law²². In 1935, the Commission authorized the abandonment by WBA of its franchise;²³ primarily, to increase the value of the other assets to be sold during a foreclosure sale.²⁴ Thereafter, the assets and real property owned by WBA were sold pursuant to a foreclosure sale.²⁵ According to BWRR, the franchise has not been repealed or revoked by the General Assembly, has not expired due to non-use, and was not sold or transferred as a result of the foreclosure sale.²⁶ BWRR asserts that the transfer of the franchise to BWRR by the Commission and the Commission authorization to exercise the

²² Application, Ex. A, Nos. 1-5 (Under the WBA franchise, WBA had authority to construct a railroad from a termini "on or near the eastern boundary of the District of Columbia and a point in or contiguous to the city of Annapolis on the Severn River ... passing through the counties of Prince George and Anne Arundel, and the city of Annapolis," which in 1902 was expanded to include "a point at or near the city limits of the city of Baltimore." Additionally, its franchise included the authority to construct and operate a railroad from "some convenient point in Baltimore to a point at or near Westport, in Baltimore county," obtain approval to change the termini in Baltimore County to "a point at or near Clifford Junction ... where it proposed to connect with the lines of the Washington, Baltimore and Annapolis Electric Railway Company.").

²³ Application, Ex. A, No. 8.

²⁴ *Id.*

²⁵ Application, Ex. A, No. 9.

²⁶ Application at 8-9.

franchise is a "first, crucial step" in the development of the SCMAGLEV.²⁷

In its Application, BWRR states that it is not seeking the franchise for "authorization to construct, which is obtained from other agencies."²⁸ According to BWRR, the Surface Transportation Board has exclusive jurisdiction to authorize the construction of the SCMAGLEV, including the specific route,²⁹ and the Federal Railroad Administration has exclusive jurisdiction over the safety standards for operation of the SCMAGLEV.³⁰

Economic, Environmental and Social Benefits of the SCMAGLEV

According to studies conducted by The Louis Berger and sponsored by BWRR's witness Racciatti, construction of the Maryland portion of the line from Washington, DC to Baltimore will create approximately 74,000 Maryland job years³¹ and will add approximately \$6.5 billion dollars to the Maryland Gross Domestic Product.³² Once the DC-Baltimore segment is operational, Mr. Racciatti stated that the DC-Baltimore segment will create approximately 1400 to 2900 job years annually in Maryland³³ with 5400 Baltimore job years resulting from increased visitor spending.³⁴ With the commencement of commercial operations,

²⁷ Rogers Direct at 3.

²⁸ Application, Ex. B, Response to Question No. 8.

²⁹ Rogers Rebuttal at 4.

³⁰ Roger Rebuttal at 9.

³¹ Racciatti Rebuttal, Ex. A; TR at 145.

³² Racciatti Rebuttal, Ex. A; TR at 147.

³³ *Id.*

³⁴ Racciatti Rebuttal, Ex. A; TR at 146

Mr. Racciatti expects a benefit of greater access to BWI Airport from Downtown Washington in that it would be a 10 minute SCMAGLEV ride whereas other modes of public transportation require trips lasting from 25 minutes to more than an hour.³⁵ Mr. Racciatti also expects that other individuals that may not use the SCMAGLEV may benefit from the reduction in traffic congestion, which may save these individuals time on their commute.³⁶ Additionally, he anticipates that residential property values around the Baltimore station will increase by approximately 30% and commercial property by 43%.³⁷ With the expected transition of commuters and travelers from driving or flying to riding the SCMAGLEV, The Louis Berger study predicted a 2,000,000 ton reduction in greenhouse gas emissions once commercial operations of the SCMAGLEV begin.³⁸

Federal Approvals and Process

According to Mr. Rogers, BWRR will submit an application to the Surface Transportation Board for authority to construct the SCMAGLEV and an application to the Federal Railroad Administration for a "rule of particular applicability" that will dictate safety requirement for the Project.³⁹ As part of the process, BWRR expects the Federal Railroad Administration to serve as the lead agency overseeing a comprehensive review of the Project for compliance with the requirement of the National Environmental

³⁵ Racciatti Rebuttal, Ex. A.

³⁶ Racciatti Direct at 24.

³⁷ Racciatti Rebuttal, Ex. A.

³⁸ Racciatti Rebuttal, Ex. A; TR at 147.

³⁹ Rogers Direct at 8.

Policy Act ("NEPA") and other federal environmental laws, analyzing the environmental impact of the Project and its proposed route.⁴⁰ Mr. Rogers estimated the federal approval process would take approximately two to three years.⁴¹ He further indicated that BWRR expected to file the federal applications shortly after the determination of the Commission.⁴²

Positions of Parties

Staff's Position

In its testimony and subject to certain conditions, Staff did not oppose the transfer of the franchise to BWRR. Staff witness Norman agreed, for the most part, with BWRR's economic benefit analysis. She, however, focused her analysis on the "broader impacts of reducing transit times between [Washington, DC, Baltimore] and the airport at the State level."⁴³ She noted that, as BWRR had not yet identified the proposed route and station locations, "any assessment of the local, direct costs, benefits, and impacts of the proposed service is necessarily uncertain."⁴⁴ Even though Staff did not have access to the more detailed analysis that BWRR is developing to present to the federal agencies, Dr. Norman expressed her comfort in recommending grant of the franchise as requested by the applicants as long as the conditions of the grant required that "the franchise be evaluated for its appropriate

⁴⁰ *Id.*

⁴¹ TR at 32.

⁴² TR at 124.

⁴³ Norman Direct at 7.

⁴⁴ *Id.*

use at critical points in the development of the process, and/or meaningful engagement by the Commission in the approval process for various aspects of the proposed system with other agencies, as well as the lack of reliance on ratepayer funding."⁴⁵ Staff witness Taborsky analyzed the technical aspects of the Project. Based on his review, he proposed certain conditions to ensure that the SCMAGLEV was operated safely.⁴⁶

In its brief, Staff raised a question of whether BWRR actually requires the franchise that it seeks to be transferred in order to construct and operate the SCMAGLEV. Staff suggested that BWRR is merely seeking a finding by the Commission that the development of the SCMAGLEV in Maryland is in the public interest. Nevertheless, it maintained its recommendation that the Commission approve the transfer and exercise of the franchise, subject to the proposed conditions attached to its brief.

BWRR Position

In its brief, BWRR points out that, for the most part, Staff and BWRR are in agreement that approval of the transfer to and authority to exercise the franchise by BWRR is in the public convenience and necessity. BWRR expresses its willingness to accept a majority of Staff's proposed conditions, if its Application is granted. BWRR, however, takes issue with a small number of the proposed conditions: (1) The portion of Condition 2 conditioning the grant of authority to exercise the franchise on

⁴⁵ Norman Direct at 26.

⁴⁶ Taborsky Direct at 11-12.

BWRR agreeing in writing to obtain the consent of the Mayor and City Council of Baltimore City as set forth in the franchise provisions; (2) Condition 3 limiting the exercise of the franchise to 75 years, with the ability to renew; (3) The portion of Condition 5 that requires BWRR, upon completion of construction, to file an operating report every three years, which shall include an operating report for the preceding three years, and an operation and maintenance plan and capital budget for the upcoming three-year period; (4) In Condition 11, it asks that the funding be limited to the amount of \$50,000, but otherwise does not object to the Condition; and (5) Condition 13 which requires it to obtain a franchise to build and operate the SCMagLeV line from Baltimore to the Maryland/Delaware State line from the State's General Assembly or from the applicable counties prior to seeking federal approval for the northern extension.

Consideration of Evidence

Status of the WBA Franchise

In 1935, WBA abandoned its right to exercise the franchise at issue in this proceeding. When all of its assets were liquidated by order of the bankruptcy court through a foreclosure sale, it ceased operations of its railroad and became a defunct corporation.⁴⁷ Pursuant to its franchise, among others, WBA operated a route from Washington, DC to Baltimore, which is referred to as the "WBA Main Line." According to Staff, the right-

⁴⁷ See *Maytag Corporation v. Navistar International Transportation Corp., et al.*, 219 F.3d 587, 591 (7th Cir. 2000). ("Liquidation in or out of bankruptcy means the end of a corporation's existence.")

of-way on which the WBA Main Line was constructed is used for other purposes.⁴⁸ BWRR argues that the WBA franchise continues to exist because the General Assembly never repealed it or revoked it. Further, BWRR asserts that the franchise has not been transferred to any other entity because there is no record of the Commission granting any other railroad company authority to exercise.⁴⁹ In its brief, Staff does not contest the continued existence of the franchise.

The question of whether a franchise is valid is a judicial question over which the Commission has no jurisdiction.⁵⁰ Just as the Commission does not have authority to grant a franchise,⁵¹ it has no authority to revive a lapsed franchise or validate an invalid franchise.⁵² The record has no evidence of any court challenge to the validity or continued existence of the franchise, and Staff does not contest that the franchise continues to exist and is valid. Consequently, as the record contains no evidence to contradict BWRR's position, I will accept BWRR's arguments that the WBA Franchise has not lapsed due to non-use and remains a valid franchise.

⁴⁸ Taborsky Testimony at 4.

⁴⁹ BWRR Brief at 9.

⁵⁰ See *Eastern Shore Publ. Service* at 339 ("On the other hand, the validity or extent of charter powers or franchises is a judicial question."); See also *City & S.R. Co. v. Washington, W. & G.R. Co.*, 122 Md. 655 (1914) ("It is equally clear that [the Public Service Commission] is not the tribunal to determine such questions as whether or not the charter of the appellee was valid, which is purely and clearly a judicial question.")

⁵¹ See *Commissioners of Cambridge v. Eastern Shore Public Service Co.*, 192 Md. 333, 339 (1949) ("*Eastern Shore Publ. Service*").

⁵² Md. Ann., Publ. Util. Art., § 5-203.

Authority to Transfer the WBA Franchise

BWRR relies on the provision of Publ. Util. Art., § 5-103 to support its contention that the Commission has authority to grant its application to acquire the abandoned WBA Franchise. BWRR asserts that, contrary to Staff's argument in its comments filed prior to when the proceeding was designated for hearing, Publ. Util. Art., § 5-103 "places no temporal restriction on when the Commission may consider an application to transfer."⁵³ In its brief, Staff did not pursue its argument that a transfer of an abandoned franchise must be contemporaneous with the grant of abandonment and the transferee must render the same service as the prior franchise holder.

BWRR is correct that there is no explicit language in Publ. Util. Art., § 5-103(b)(1) that requires an application to transfer an abandoned franchise to be submitted or considered by the Commission at the same time as or near in time to a petition to abandon the franchise. The statutory language, however, suggests that the Commission was given the authority to transfer an abandoned franchise to ensure that existing customers are not harmed due to the discontinuance or interruption of utility or public transportation services caused by the existing franchise holder's inability to maintain the service to the customers. Currently, no service to the public is being provided pursuant to the WBA Franchise, but at the time the petition to abandon was submitted, there was. In granting the WBA abandonment petition,

⁵³ BWRR Brief at 14.

the Commission found the abandonment of the franchise to be in the "future public convenience and necessity" despite the adverse impact on the persons using the WBA train services when operations of the WBA ceased.⁵⁴

The question, however, is not necessarily whether the Commission has authority to approve the transfer of the WBA Franchise, but what does an approval of the transfer actually convey to BWRR? As WBA has long ceased railroad operations associated with its authority to exercise the franchise, any agreements, consents, or other property rights that WBA obtained through the exercise of the franchise were either sold or liquidated or have lapsed or expired. Even if BWRR were to obtain transfer of the WBA Franchise, it may not be considered to be a "successor" corporation or an assignee of WBA, which is a defunct, liquidated corporation. I agree with Staff that "the Applicant cannot reasonably claim that the consent given by Baltimore City more than a century ago, for the construction of a very different type of railroad, on a completely different right-of-way, can apply to its proposed SCMAGLEV now."⁵⁵ Thus, a transfer of the WBA Franchise can only be of the "nascent" franchise and the authority to exercise the franchise that WBA may have been granted and any actions that WBA took or agreements/consents obtained do not convey as part of an approval to the transfer the Franchise.

Accordingly, I find that the Commission has authority to transfer the WBA Franchise to BWRR under the Publ. Util. Art.

⁵⁴ Application, Ex. A, No. 8.

⁵⁵ Staff Brief at 12.

§5-103(b)(1), but the approval of the transfer of the WBA Franchise does not transfer any authority to exercise the WBA Franchise nor does it convey any agreements, consents or other tangible or intangible rights acquired by WBA through its exercise of the Franchise. The extent to which BWRR may exercise the authority is a separate action by the Commission, and the Commission may determine what rights under the WBA Franchise BWRR may exercise as well as any corresponding obligations BWRR must comply with under the Franchise to enjoy the privileges granted by it.⁵⁶ The Commission, however, must find that the transfer and subsequent authority to exercise the Franchise is in the public convenience and necessity.

Evaluation of the Public Convenience and Necessity

In the best case scenario, BWRR does not expect to begin construction of the DC-Baltimore segment until 2019. It anticipates commercial service between Washington, DC and Baltimore City will begin in 2025 or 2026. BWRR presented studies to demonstrate the economic, social, and environmental benefits to the State and Baltimore during the construction of the DC-Baltimore segment and after commercial service on the segment begins. Staff reviewed BWRR studies and did not disagree with the methodology used to arrive at the results. Staff conducted its own evaluation of the

⁵⁶ See *Worcester Elec. Co. v. Hancock*, 151 Md. 670, 678 (1927) ("The powers conferred upon the [Public Service] commission are of a regulatory nature. They do not include either the granting or withdrawal of franchises, although the exercise of rights under franchises duly acquired by private corporations and of powers acquired by municipalities under legislative grants may be permitted or prohibited by the commission, subject to the right of appeal ...") (*Worcester Elec. Co.*).

"broader impacts of reducing transit time between the downtowns of the two cities and the airport at the State level."⁵⁷ Staff determined that the "[l]ocal impacts have the potential to be very significant, both economically and from a public interest perspective."⁵⁸

I have no doubt that the construction and operation of the SCMAGLEV between Washington, DC and Baltimore will result in substantial economic and social benefits to the State and Baltimore and be consistent with the State's environment laws and policies enacted or adopted to reduce harmful emissions for cleaner air and address the causes of climate change. The record, however, has little, if any, specific information that permits me to evaluate "the number of residential and commercial premises [that may be] affected, the population impacted and their vulnerability to negative impacts in particular, the changes in patterns of congestion, the accessibility of the stations to potential users, and [all of] the direct and indirect environmental impacts"⁵⁹ resulting from the construction and operation of the DC-Baltimore segment. BWRR argues that the review of the more specific, detailed analysis of these impacts will be conducted by the Surface Transportation Board and/or Federal Transportation Board, and the Commission will be able to participate in those proceedings to protect the interests of the State, its residents, and businesses. Similar to Staff's position that a finding of public convenience

⁵⁷ Norman Direct at 7.

⁵⁸ *Id.*

⁵⁹ Norman Direct at 7.

and necessity may only be met if the approval of the transfer of the franchise to BWRR is subject to Staff's proposed conditions, I conclude that all of the foregoing factors must be taken into account now in order to make an unconditional public convenience and necessity finding. Consequently, I find that, based on this record, any finding that the approval of the transfer of the Franchise (and any authority to exercise it) as being consistent with the public convenience and necessity requires conditions be placed on the transfer and exercise of the Franchise.

In its brief, Staff has suggested that the purpose of the filing may be to obtain a finding by the Commission that the segment of the SCMAGLEV to be constructed in Maryland is in the public interest and thereby bolster BWRR's case before the Surface Transportation Board and the Federal Railroad Administration. Indeed BWRR's position that the Surface Transportation Board has exclusive jurisdiction over authorizing the construction and operation of railroads seems to contradict BWRR's characterization of the "critical" need to obtain the authority to exercise the WBA Franchise. Further, in an exchange with Staff's counsel during cross-examination, Mr. Rogers dismissed counsel's suggestion that BWRR will require a further franchise from the State or a county or a municipal corporation to construct any future extension of the SCMAGLEV to the Maryland/Delaware state line.⁶⁰ Mr. Rogers appeared to suggest that, in fact, BWRR does not require the WBA Franchise to pursue the construction and operation of the

⁶⁰ TR at 26.

DC-Baltimore segment.⁶¹ Later in his testimony, Mr. Rogers did amend his position somewhat and maintained BWRR did need the Franchise.⁶²

BWRR explained, in opposition to Staff's proposal to make transfer of the franchise "contingent upon acceptance of the FRA and Surface Transportation Board," that the "transfer of the franchise now [is] a preliminary step to obtaining those approvals."⁶³ Mr. Rogers conceded that BWRR's "authority to construct and operate the SCMAGLEV is contingent on obtaining [the Surface Transportation Board and Federal Railroad Administration] approvals, but that is a different subject. If every approval were contingent on the other, none would ever be obtained."⁶⁴ He also offered that "all federal agencies want to know in the beginning what is the State of Maryland going to think of this train as well. So one of the first steps we had was coming to the Commission ... to have a proceeding ... to get the franchise which would be a finding of the Commission that it was in the public convenience and necessary for the State of Maryland."⁶⁵

Currently, the only SCMAGLEV in operation is located in Japan.⁶⁶ It consists of a 26-mile segment and just recently began commercial operations after 18 years of testing. Construction to extend the segment to the larger Japanese cities the line is

⁶¹ *Id.*

⁶² TR at 37.

⁶³ Rogers Rebuttal at 16.

⁶⁴ *Id.*

⁶⁵ TR at 26-27.

⁶⁶ TR at 119.

intended to link has begun.⁶⁷ BWRR's ultimate goal is to deploy a SCMagLeV in the Northeast Corridor and provide the 300+ mph train service to passengers traveling from Washington, DC to New York City. As Mr. Rogers noted "not everyone can go to Japan and ride a 300 mile an hour train. But certainly people getting off at BWI Airport that could then be in DC in 8 minutes or Baltimore in 5 minutes, I think that seeing is believing for the public going forward."⁶⁸ With the cost of the 40-mile segment from DC to Baltimore estimated at \$10 billion, most likely, BWRR must be able to demonstrate "proof of the concept" to obtain the necessary approvals and financing to be able to complete construction of and operate the SCMagLeV between DC and New York City. As explained by Mr. Rogers, "transfer of the railroad franchise is a necessary first stage of an extensive regulatory approval process for the SCMagLeV."⁶⁹

Based on the evidence in the record, I conclude that BWRR's acquisition of the Franchise may facilitate the needed approval at the federal level to construct the DC-Baltimore segment and thus lead to the realization of the projected economic, social and environmental benefits to the State and Baltimore as described in the record in this proceeding. I therefore find that it is not necessarily contrary to the public interest to grant the transfer of the WBA Franchise to BWRR prior to its receipt of the required authority from the Surface Transportation Board and Federal

⁶⁷ Rogers Direct at 4.

⁶⁸ TR at 36.

⁶⁹ Rogers Direct at 7.

Railroad Administration; however, as I previously determined, certain conditions are needed to ensure that BWRR's authority to exercise the franchise continues to be in the public convenience and necessity.

Consideration of Staff's Proposed Conditions

Attached to its brief, Staff listed its 14 proposed conditions to be incorporated into an approval of any transfer of and authority to exercise the WBA Franchise by BWRR. BWRR has accepted, without revisions, Conditions 1, 4, 6-10, 12, and 14, and either opposes a portion of or the entirety of the remaining conditions. As there is no controversy over Conditions 1, 4, 6-10, 12, and 14, and as I find them acceptable and appropriate, I will not discuss or analyze these Conditions. Below I consider the merits of the Conditions in controversy.

Staff's Proposed Condition 2

BWRR does not object to the portion of Condition 2 that requires it to notify by letter the executive or county council (or equivalent) of each county and Baltimore City, through which the SCMAGLEV will pass, of each public hearing related to the project to be held by the Federal Railroad Administration and Surface Transportation Board or other government agency. It opposes Staff's requirement that, without regard to the federal jurisdiction, BWRR agree in writing to seek the consent of the Mayor and City Council of Baltimore City as specified in the WBA Franchise and consistent with Publ. Util. Art. § 5-407 and § 9-303(d).

First, BWRR argues that the WBA Franchise does not specify that the "authority to exercise a railroad franchise was contingent on the consent of Baltimore City."⁷⁰ It asserts that the consent was necessary only if the franchise holder sought to construct its railway on specific City streets. Similarly, it asserts that Publ. Util. Art. § 9-303(d) applies to condemnation actions by the railroad company and has no bearing on the transfer or exercise of a franchise. Further, it claims that Pub. Util. Art. § 5-407 is categorically preempted by 49 U.S.C. 10501(b)(1).

Staff argues that this condition is needed primarily because "Baltimore is the most densely populated and built-up part of the State"⁷¹ and it is concerned with BWRR's plans to construct a station in the most densely built up portion of Baltimore and construct a new route through the City to the station. Staff believes the City officials should be provided the opportunity to protect the interests of the City and its residents, "as the General Assembly intended."⁷²

This particular dispute highlights one of my concerns that the record does not have sufficient detail to evaluate potential adverse short-term and long-term impacts to residential neighborhoods and commercial businesses, especially in Baltimore City, and on the vulnerable population within Baltimore which may be more negatively affected as a result of the selected route. Although Mr. Rogers represented that Baltimore City's Mayor and her

⁷⁰ BWRR Brief at 23.

⁷¹ Staff Brief at 12.

⁷² *Id.*

staff had been briefed, and she consented to the Baltimore Development Corporation submitting a letter to the Commission in support of the project,⁷³ I conclude that it is unlikely that BWRR shared its more detailed, specific analysis of impacts, both positive and negative, with the Mayor. Mr. Rogers also did not testify as to whether the Baltimore City Council or any key members of it had been briefed.

BWRR is seeking to acquire the WBA Franchise because it finds it of value to move its applications forward at the federal level.⁷⁴ Although the Surface Transportation Board and the Federal Railroad Association may have exclusive jurisdiction to approve the construction of the SCMAGLEV and its operations, the State laws governing eminent domain and condemnation rights of a Maryland railroad company are not preempted unless the factual assessment has been made of whether the action would have the effect of preventing or unreasonably interfering with railroad transportation.⁷⁵ Moreover, the Surface Transportation Board has determined that a "carrier cannot invoke section 10501(b) preemption to avoid obligations under an agreement it had entered into voluntarily, where

⁷³ TR at 101-102.

⁷⁴ Even a franchise under which the holder has no authority to exercise it has some value. See *Highfield Water Co. v. Public Service Commission of Maryland*, 46 Md.App. 332, 347 (1980) ("Although the economic effect of an order revoking a utility's right to exercise a franchise could, in some instances, be tantamount to revocation of the franchise itself, it is not necessarily so. The franchise remains as a valuable asset which, under certain circumstances, may be sold and which, in other hands b[e] exercisable ... It may thus have an intrinsic value apart from the ability to exercise it.") (*Highfield Water Co.*).

⁷⁵ See *Dakota, Minneapolis, & E.R.R. v. State of South Dakota*, 236 F. Supp.2d 989 (D.S.D. 2002), aff'd on other grounds, 362 F.3d 512 (8th Cir. 2004).

enforcement of the agreement would not unreasonably interfere with interstate commerce."⁷⁶

As discussed, the record is devoid of any actual facts as to the route on which the SCMAGLEV will be constructed or the location of any station, within or outside Baltimore City; consequently, I find no evidence that requiring BWRR to obtain Baltimore City's consent as required under the two statutory provisions and the terms of the Franchise will "prevent or unreasonably interfere with railroad transportation."⁷⁷ Further, as BWRR is voluntarily seeking the Commission approval to acquire the Franchise, I consider its opposition to Staff's condition as a means to "avoid obligations" associated with the Franchise without any evidence in the record that seeking Baltimore City's consent will "unreasonably interfere with interstate commerce."⁷⁸

Moreover, the WBA Franchise grants authority for only an intrastate railroad. Although BWRR expresses its intent to construct an interstate railway, it has no authority at this time to do so. Thus, as BWRR elected to pursue transfer of the Franchise and authority to exercise it prior to receiving authority to construct the DC-Baltimore segment from the Surface Transportation Board, I find that its arguments pertaining to federal preemption are premature when there is no interstate component associated with the WBA Franchise.

⁷⁶ See *Township of Woodbridge v. Consolidated Rail Corp.*, STB Docket No. 42053 (STB served Dec. 1, 2003).

⁷⁷ Supra fn 75.

⁷⁸ Supra fn 76.

Publ. Util. Art. § 5-407 and § 9-303(d), however, are not necessarily relevant to an approval to transfer the WBA Franchise, when I have found that no authority to exercise the Franchise is conveyed with the transfer; these statutes exist independent of whether the WBA Franchise is transferred to BWRR or not. Similarly, the mere approval of the transfer of the Franchise, without a corresponding grant of authority to exercise the Franchise, also does not require the condition proposed by Staff. Nevertheless, Staff's condition is relevant to any grant of authority to exercise the Franchise.

As I found earlier, BWRR may not rely on any consents or agreements given by Baltimore City to WBA prior to WBA abandoning the exercise of its Franchise. Consequently, if BWRR is voluntarily acquiescing to the Commission's jurisdiction by its application for transfer of the WBA Franchise and authority to exercise the Franchise, then it must be willing to agree to meet its obligations under the Franchise associated with the rights and privileges afforded to it by the Franchise. Once it has federal approval for construction of the DC-Baltimore segment, BWRR may seek to modify Condition 2 by submitting actual data that establishes that obtaining Baltimore's consent under the Publ. Util. Art. § 5-204 and § 9-303(d) or under the terms of the Franchise will "prevent or unreasonably interfere" with its construction and operation of the SCMAGLEV and therefore interstate commerce. Accordingly, I accept Condition 2 as proposed by Staff.

Staff's Proposed Condition 3

In Condition 3, Staff proposes that the right to exercise the franchise expire after 75 years from the date of the final order in this matter, renewable upon application and review by the Commission. BWRR strenuously objects to this condition as it is concerned that investors may not wish to commit to financing the overall long-term project if the franchise is time limited. In the event that the SCMAGLEV is extended to New York City, as planned, Mr. Racciatti described the benefits to the Northeast Corridor region, including Baltimore.⁷⁹ Although Maryland and Baltimore may receive the benefits of the DC-Baltimore segment, the "true" potential value of the SCMAGLEV is the high-speed train travel between DC and New York City. The fact that neither BWI nor Baltimore City will be an "express station" after completion of the SCMAGLEV from DC to New York seems to support this observation.⁸⁰

Currently, BWRR estimates construction costs for the DC-Baltimore segment to be \$10 billion and the 40-mile segment will take approximately 7 years to construct. To extend the SCMAGLEV to New York, BWRR must construct additional guide ways and at least three additional stations,⁸¹ with the potential of having to tunnel under the Hudson River.⁸² Mr. Rogers could not provide an approximate cost or time of construction as he considered them too speculative.⁸³ On the other hand, Staff has expressed its concern

⁷⁹ Racciatti Direct at 18-22.

⁸⁰ TR at 29.

⁸¹ Rogers Rebuttal, Ex. C.

⁸² TR at 36.

⁸³ TR at 48.

about whether BWRR's acquisition of the franchise will remain in the public convenience and necessity, especially with the lack of certainty as to the location of the route and the stations in Maryland.

The restriction proposed by Staff goes to the authority to exercise the franchise and not the revocation of the franchise itself. The Commission may revoke the authority to exercise the franchise,⁸⁴ but it cannot revoke the franchise itself.⁸⁵ I conclude that, as argued by BWRR, a 75-year expiration date on the authority to exercise the franchise may foreclose BWRR from acquiring the needed financing to extend the SCMAGLEV as intended. It may also have an unintended consequence of impeding financing for the DC-Baltimore segment and delay the start of construction and the timing of the commercial operations of the segment. I therefore find that a time restriction on the authority to exercise the franchise, even subject to renewal, is not in the public interest and I will not accept it.

Staff's Proposed Condition 5

BWRR makes minor changes to a portion of the Staff's proposed reporting requirements and outright rejects the filing of a report that includes an operation report and/or operational budget. In its brief, Staff did not comment on the need for its conditions.

⁸⁴ See *Highfield Water Co.* at 347.

⁸⁵ See *Worcester Elec. Co.* at 678.

Staff's conditions appear to address concerns that BWRR may be unable to sustain operation of the DC-Baltimore segment of the SCMAGLEV and allow the Commission to review whether the authority to exercise the franchise should be revoked or modified. I conclude that BWRR's agreement to provide informational status reports and updated schedules of milestones is sufficient to keep the Commission apprised of the status of the development of the SCMAGLEV. I will accept Condition 5 as modified by BWRR.

Staff's Proposed Condition 11

Condition 11, as proposed by Staff, requires BWRR to provide sufficient funding to each County and Baltimore City through which the SCMAGLEV will pass for training local EMS personnel for evacuation, rescue and planning on a SCMAGLEV. BWRR does not oppose Condition 11, but asks that the amount of funding be limited to \$50,000 to each County and Baltimore City. Although the Federal Railroad Administration will adopt safety standards for the operation of the SCMAGLEV, I find that Condition 11 is necessary to ensure that local and county governments are able to train their emergency personnel to handle any situations in which passengers are needed to be evacuated or rescued from the SCMAGLEV, and/or to address the safety of individuals/businesses adjacent to the SCMAGLEV line. Even though Mr. Rogers testified that the SCMAGLEV has been operating for approximately 18 years without an accident, an unexpected emergency could arise and the lack of EMS training may endanger the passengers' well-being as well as that of the EMS personnel and persons residing or owning businesses near the

emergency site. I, however, find the request to limit the amount of the funding required to be reasonable. I accept Condition 11 and will limit the amount that BWRR must provide in funding to \$50,000 to each County and Baltimore City through which the SCMAGLEV will pass, as requested by BWRR.

Staff's Proposed Condition 13

Condition 13 reflects Staff's concerns that BWRR will either begin its extension of the DC-Baltimore segment from Baltimore City to the Maryland/Delaware state line without obtaining any further approvals from the Commission. BWRR argues that the condition is beyond the scope of this proceeding. I agree with BWRR that this proceeding is to determine whether to transfer the WBA Franchise to BWRR to allow it to develop the DC-Baltimore segment of the SCMAGLEV. Although the intent of BWRR is to construct a SCMAGLEV from DC to New York City, the segments that extend past Baltimore City are not the subject of this proceeding. Consequently, I will not accept Staff's Condition 13, but I conclude some restriction as to the extent that BWRR may exercise the franchise is necessary.

The WBA Franchise allowed WBA to operate a number of routes, including a route from Annapolis to Baltimore and a route from Washington DC to Annapolis.⁸⁶ In his testimony, Mr. Rogers stated that BWRR was not building the SCMAGLEV to Annapolis.⁸⁷ According to Mr. Rogers, the route from Washington, DC to Baltimore

⁸⁶ Application, Ex. A, Nos. 1-5.

⁸⁷ TR at 24.

(the WBA Main Line) was the portion of the WBA Franchise that corresponded to the route for its SCMAGLEV.⁸⁸ As Staff's Condition 13 reflects some concern as to BWRR's subsequent use of the WBA Franchise, I will limit authority to exercise the WBA Franchise to the extent necessary to construct and operate a route from the eastern boundary of Maryland and the District of Columbia to Baltimore City and passing through the counties of Prince George's, Anne Arundel, and Baltimore and Baltimore City. This allows BWRR the flexibility to build the preferred or an alternative route and select the sites of the stations within the counties of Prince George's, **Anne Arundel**, Baltimore and Baltimore City. In the event BWRR seeks authority to exercise any other portion of the WBA Franchise, it must submit an application to the Commission to do so. As such, the grant of authority to exercise the WBA Main Line Franchise does not include any authority to construct and operate the SCMAGLEV elsewhere in Maryland, including, among other things, extending the line from Baltimore City to the Maryland/Delaware border.

Conclusion

The evidence in the record is sufficient to find that the transfer of the WBA Franchise to facilitate the development and assist in acquiring the federal approvals necessary to build the DC-Baltimore segment of the SCMAGLEV is in the public convenience and necessity, subject to the conditions set forth in Attachment A

⁸⁸ *Id.*

attached hereto and incorporated hereby. I also find, subject to the conditions in Attachment A, grant of the authority to exercise the WBA Franchise, as limited to the WBA Main Line route, is in the public convenience and necessity.

IT IS THEREFORE, this 14th day of October, in the Year Two Thousand Fifteen,

ORDERED: (1) That the application of Baltimore Washington Rapid Rail, LLC is conditionally granted as described in the Proposed Order.

(2) That the transfer of the railroad franchise granted to the Washington, Baltimore and Annapolis Railroad Company by the Maryland General Assembly to Baltimore Washington Rapid Rail, LLC is hereby granted, subject to the conditions set forth in Attachment A hereto and incorporated by reference hereby.

(3) That Baltimore Washington Rapid Rail, LLC is hereby authorized to exercise the authority to exercise the railroad franchise granted to the Washington, Baltimore and Annapolis Railroad Company by the Maryland General Assembly to the extent discussed in the Proposed Order and subject to the conditions set forth in Attachment A hereto and incorporated by reference hereby.

(4) That this Proposed Order will become a final order of the Commission on November 15, 2015, unless before that date an appeal is noted with the Commission by any party to this proceeding as provided in § 3-113(d)(2) of the Public

Utilities Article, or the Commission modifies or reverses the Proposed Order or initiates further proceedings in this matter as provided in § 3-114(c)(2) of the Public Utilities Article.

Terry J. Romine
Chief Public Utility Law Judge
Public Service Commission of Maryland



BALTIMORE-WASHINGTON
SUPERCONDUCTING
MAGLEV PROJECT

Welcome



BALTIMORE-WASHINGTON
SUPERCONDUCTING
MAGLEV PROJECT

Purpose of Today's Meeting

At today's meeting, we are presenting:

- The proposed Project
- Initial alternatives for screening
- Preliminary screening criteria
- Identification of preliminary alternatives for further study
- Next steps

What is NEPA?

- The National Environmental Policy Act of 1969 (NEPA) created the process that federal agencies follow to analyze the potential consequences of proposed projects on the human environment, engage the public, and document the analysis to ensure informed decision making
- NEPA is an “umbrella” law that encourages integrated compliance with other environmental laws
- Compliance with NEPA will include preparation of an Environmental Impact Statement (EIS) that will be made available for public review/comment



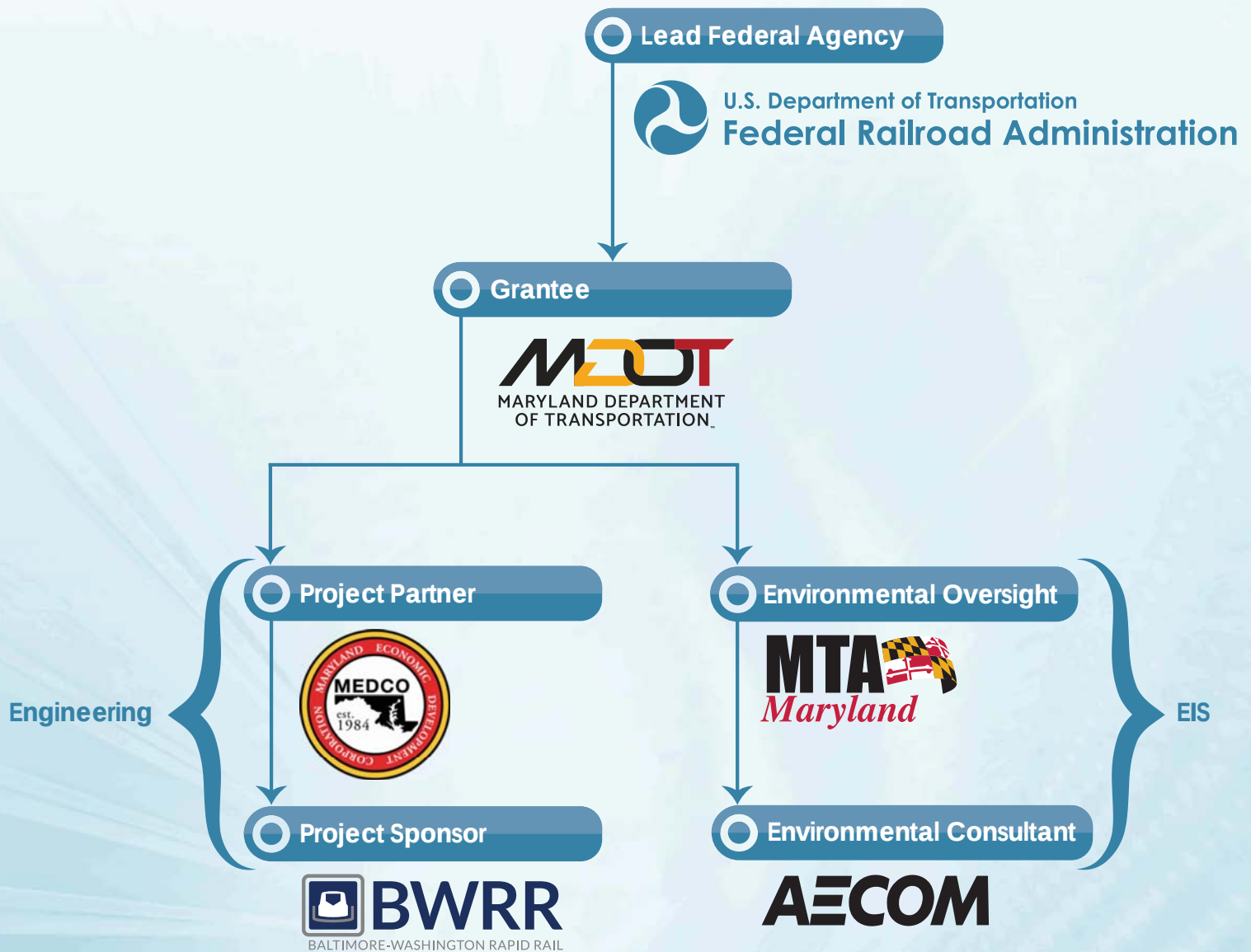
NEPA Process and Targeted Timeline

Throughout the NEPA process, the stakeholders will have opportunities to provide comments and input.



*Fixing America's Surface Transportation (FAST) Act – authorizes \$305 billion over fiscal years 2016 through 2020 for the Department of Transportation's programs.

Who is Involved?

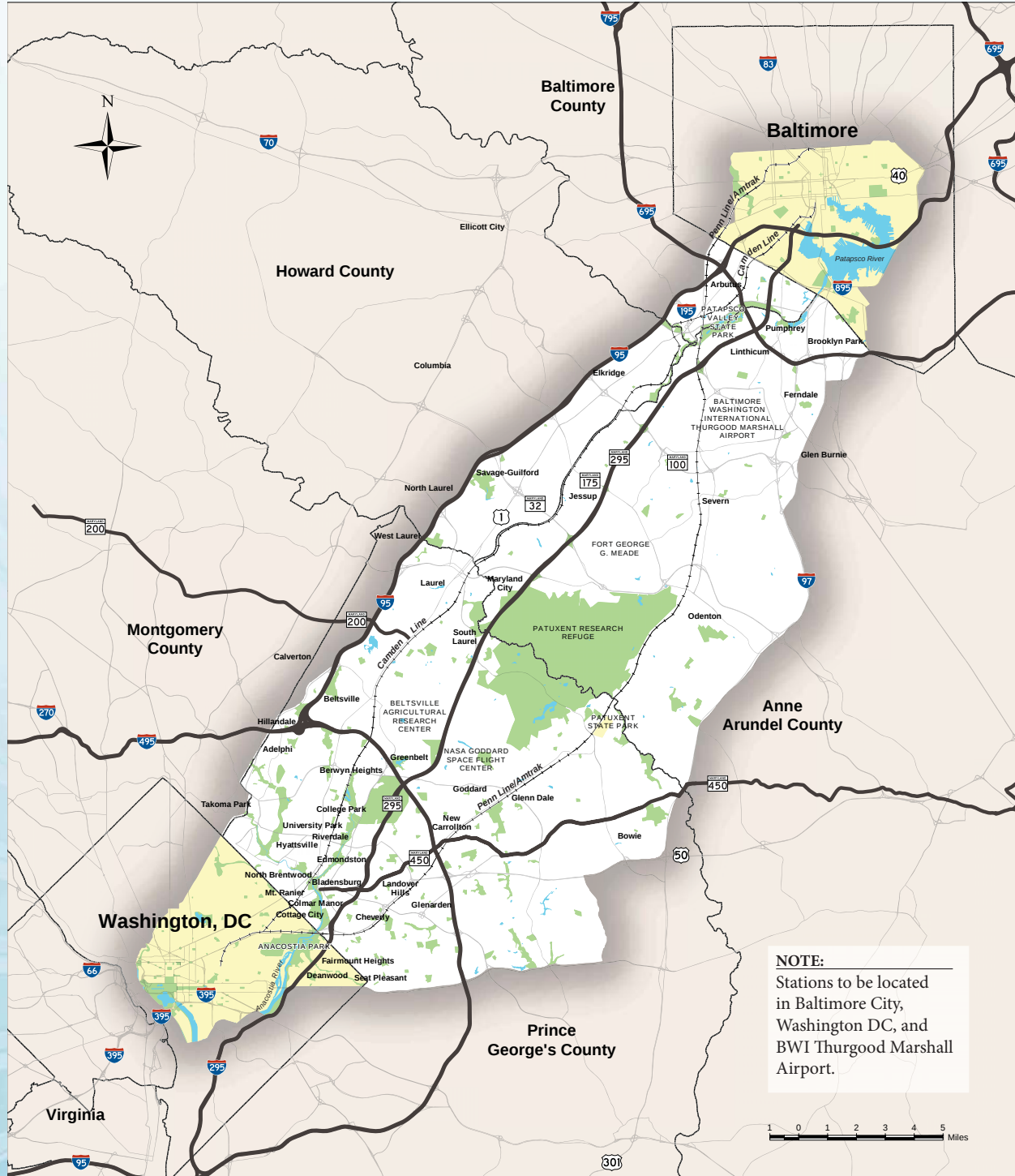


What is the Proposed Project?

- Superconducting Maglev (SCMAGLEV) train between Washington, DC and Baltimore, MD
- Three Proposed Stations:
 - » Washington, DC
 - » BWI Thurgood Marshall Airport
 - » Baltimore City
- Approximately 15-minute travel time between Washington, DC and Baltimore, MD
- Speeds up to 311 mph



Project Study Area



What is SCMAGLEV?

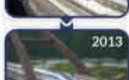
SCMAGLEV History



The Next Generation



Maglev research in Japan began in 1962 with the goal of developing the next generation of the famous Shinkansen "bullet train" system capable of connecting Tokyo and Osaka in an hour



Proven & Capable

1,000,000
miles traveled

375MPH
current world speed record

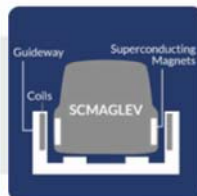
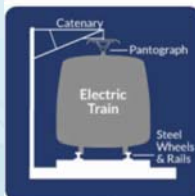
200,000
passengers carried

at JR Central's SCMAGLEV facility in Yamanashi, Japan

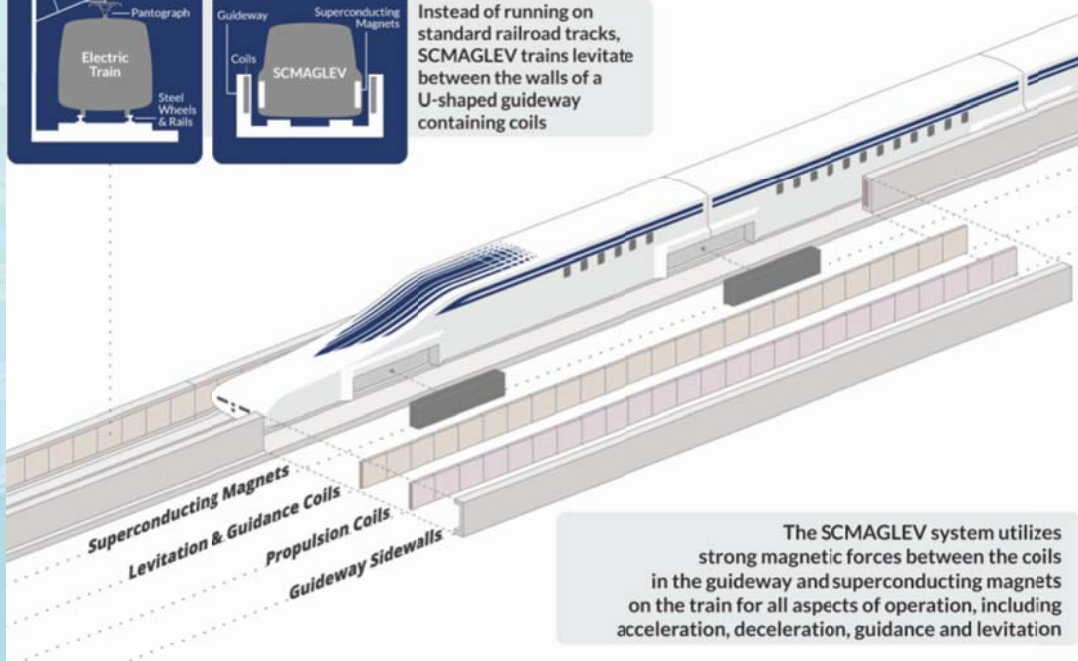
Ready for Service

Today, construction is underway on the revenue service line between Tokyo and Nagoya

How SCMAGLEV Works



Instead of running on standard railroad tracks, SCMAGLEV trains levitate between the walls of a U-shaped guideway containing coils



The SCMAGLEV system utilizes strong magnetic forces between the coils in the guideway and superconducting magnets on the train for all aspects of operation, including acceleration, deceleration, guidance and levitation

Draft Purpose and Need*

The project purpose is to:

Explore the development of a safe, revenue-producing system utilizing Maglev technology that can meet the capacity and ridership needs of the Baltimore-Washington region that does not preclude planned and future investments in intercity passenger rail (e.g., NEC Future).

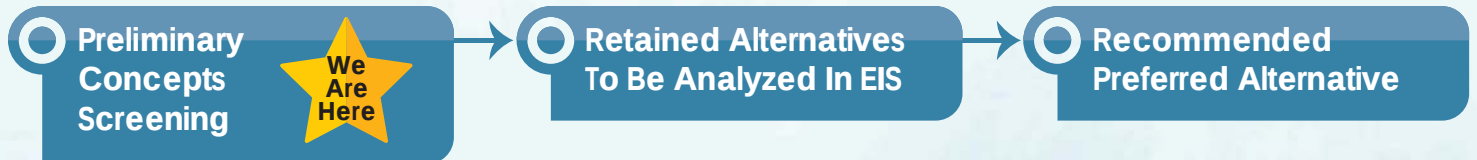
- Improve reliability and mobility options for transportation between Baltimore and Washington, DC
- Develop a system that operates in accordance with federal requirements
- Provide safe connectivity to existing transportation modes
- Provide a complementary alternative to future rail expansion opportunities
- Avoid, minimize, and mitigate impacts to the human and natural environment

*Currently with FRA for review

Previous Maglev Study Alternatives

Previous Baltimore to Washington Maglev Studies					
Criterion	1994 Feasibility Study (MTA)	PEIS Development (1999-2001)	DEIS and ARDS (2001-2002)	FEIS Study (2003-2007)	BWRR Alternatives Study (2012)
Technologies Considered	German Transrapid TR07 Japanese MLU-002/ 4 Concept Systems	German Transrapid TR07 Japanese MLU-002/ 4 Concept Systems	German Transrapid	German Transrapid	Japanese SCMagLEV
Maximum Cruising Speed	483 km/h 300 mph	386 km/h 240+ mph	420 km/h 260 mph	420 km/h 260 mph	500 km/h 311 mph
Total Travel Time	Not given	Not given	Not given	18.5 minutes	15 minutes
Alternatives Considered	1-95 Parallel - B-W Pkwy Parallel - Pkwy Independent - Amtrak Parallel	1-95 Parallel - B-W Pkwy. Parallel - Pkwy. Independent - Amtrak Parallel - Several options considered and dismissed	- I-95 Parallel - B-W Pkwy Parallel - Amtrak Parallel	- Amtrak Parallel - No-Build	- Amtrak Alignment - B-W Pkwy - WB&A Base Case - WB&A Option 1
Preferred Alignment	Not Selected	3 Alignments Retained for Further Study (DEIS Alts. Considered)	Amtrak Parallel/Alternative	Amtrak Parallel Alternative	Not given
Potential Station	DC, New Carrollton, Greenbelt, BWI, Baltimore	DC, New Carrollton, Greenbelt, BWI Aviation Blvd, BWI Airport Terminal, Baltimore	DC, New Carrollton, Greenbelt, BWI Aviation Blvd, BWI Airport Terminal, Baltimore	Union Station, BWI Option A & C, Camden Station	Mt. Vernon Station, BWI Station, Camden Station, Westport Station
Other Conclusions	Maglev declared feasible, station options and alignments identified	Maryland selected by FRA for DEIS stage. Refinements made to the alternatives retained for Draft EIS.	Amtrak Parallel Alt. selected for further study based on environmental /engineering analysis, public and agency comments. No-Build Alt. also retained for further study.	Detailed study completed. MTA concluded that construction of Maglev project would have substantial transportation benefits for the area.	Further studies are needed

Alternative Screening & Evaluation Process



- Initial alternatives concepts were screened by FRA and MDOT to determine those most reasonable based on criteria from the Purpose and Need and considering comments received during scoping
- Corridors Considered:
 - » Amtrak Corridor (Penn Line)
 - » Baltimore Washington Parkway Corridor
 - » Washington, Baltimore & Annapolis Corridor
- EIS will consider a range of alternatives, including a No Action Alternative, to be used as a baseline against which the impacts of the proposed project can be measured
- FRA and MDOT plan to identify a Preferred Alternative in the Draft EIS

Screening Level 1 Criteria

Travel Time and Speed

- Washington, DC to Baltimore in approximately 15 minutes with intermediate stop at BWI Marshall Airport
- Cruising speed 311 mph

Guideway Design

- Maximum grade (hill climb or descent) of 4% slope
- Minimum 26,300 foot curve radius to maintain operating speed
- Straight line or curved radius - over 50,000 feet preferred
- Follow public Right of Way wherever possible

Screening Level 1 Fatal Flaws

A Fatal flaw is an issue that renders an alternative infeasible or unreasonable.

ENGINEERING

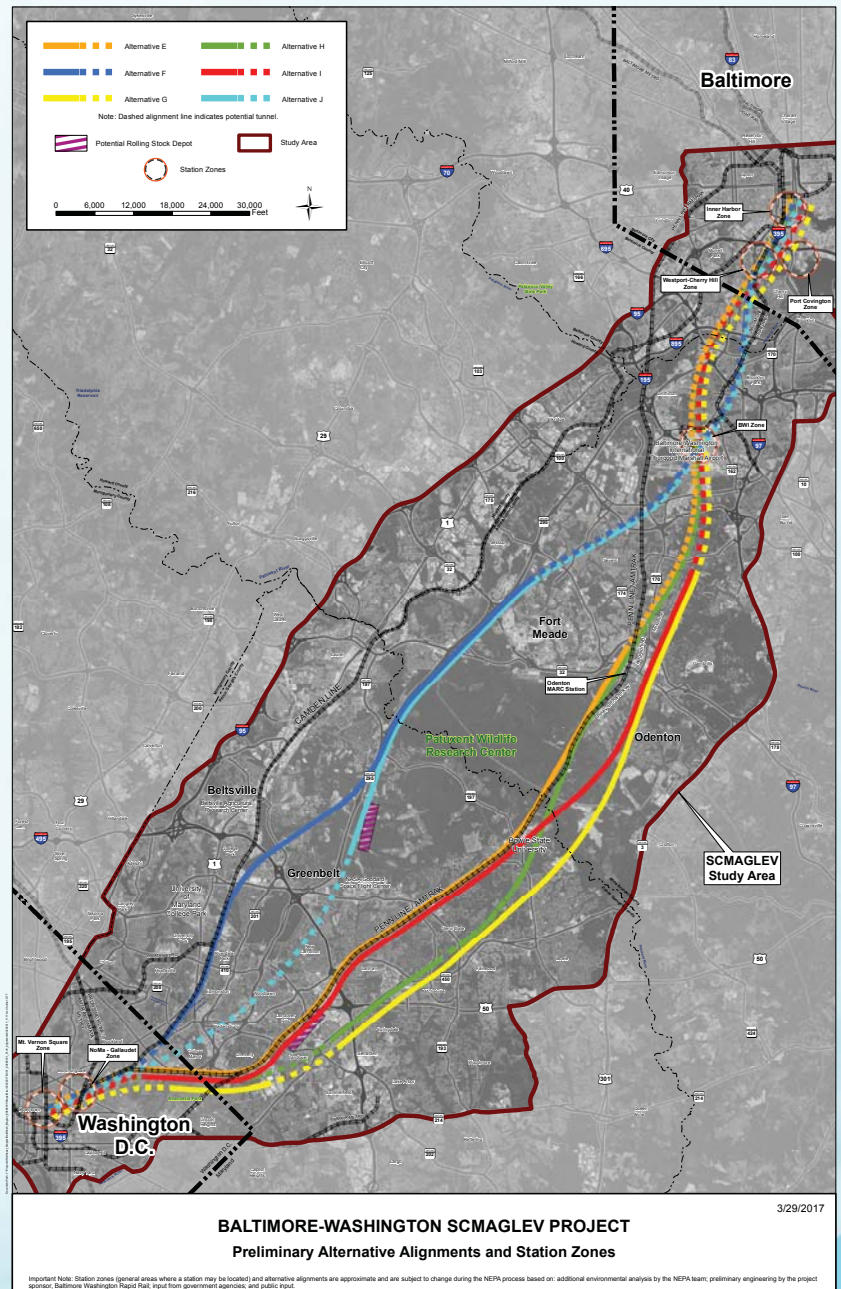
- Substandard design (alignment geometry)
- Precludes construction of other projects such as:
 - » Extension of Maglev to the north and south
 - » BWI Marshall Airport expansion
- Impacts existing critical surface or underground infrastructure such as DC Metro lines

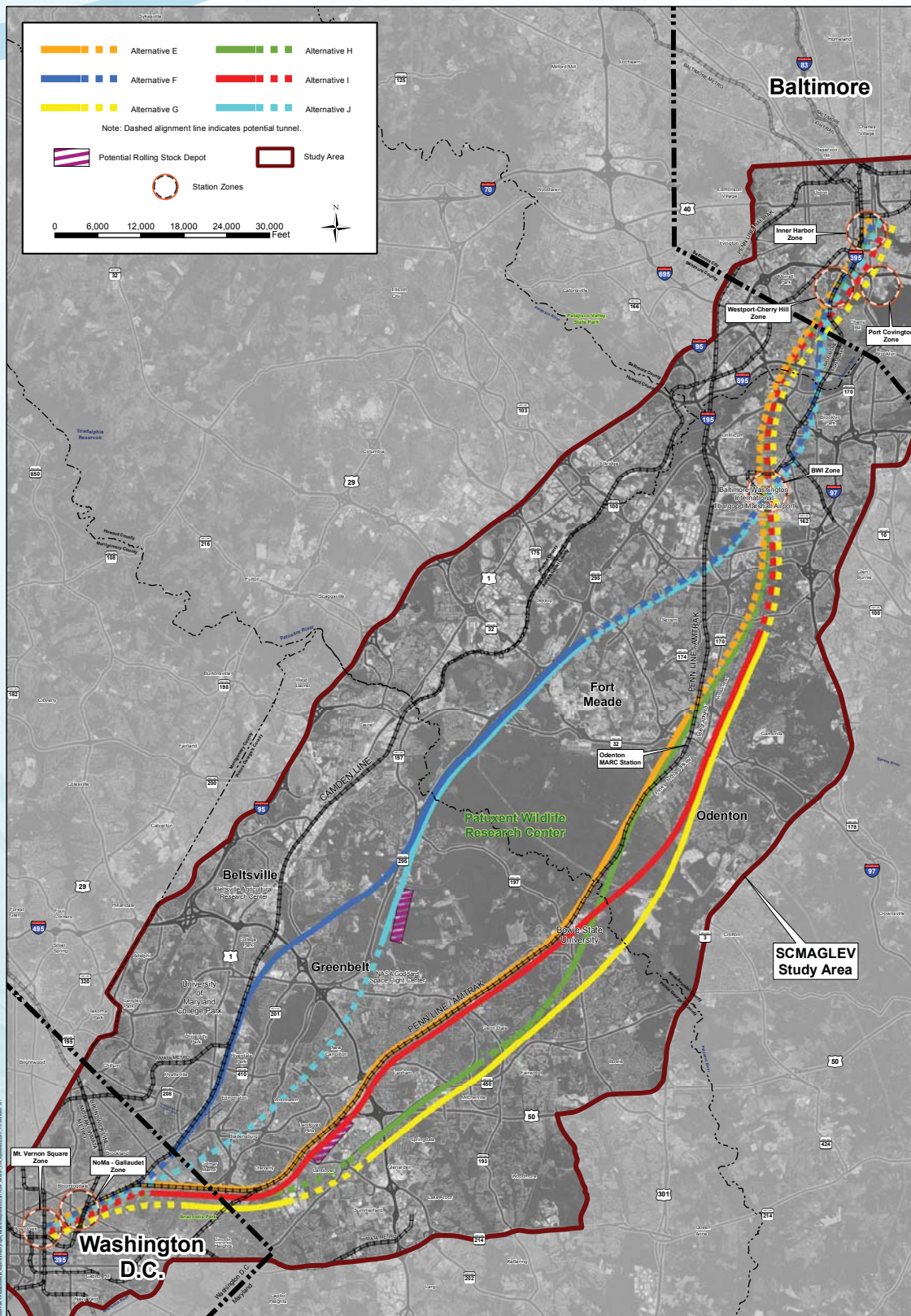
ENVIRONMENTAL

- Significant impacts to natural and cultural resources

Screening Level 2 Preliminary Initial Alternatives

- No Build
- Alternative E
(Amtrak Corridor)
- Alternative F
(BW Parkway)
- Alternative G
(WB&A)
- Alternative H
(WB&A/Amtrak Hybrid)
- Alternative I
(Amtrak/WB&A Hybrid)
- Alternative J
(BW Parkway Modified)





3/29/2017

BALTIMORE-WASHINGTON SCMAGLEV PROJECT

Preliminary Alternative Alignments and Station Zones

Important Note: Station zones (general areas where a station may be located) and alternative alignments are approximate and are subject to change during the NEPA process based on: additional environmental analysis by the NEPA team; preliminary engineering by the project sponsor, Baltimore Washington Rapid Rail; input from government agencies; and public input.

Screening Level 1 Summary

Alternative I Criteria:	Screening Level 1									
	Engineering			Operational		Environmental		Recommendation	Comment	
	Acceptable Horizontal and Vertical Geometry*	Does not Preclude Construction of Other Projects*	Significant Construction Constraints**	Designated Guideway*	Meets travel time*	Significant Impacts to Natural Resources	Significant Impacts to Cultural Resources			
No - Build Alternative	N/A	Yes	N/A	N/A	N/A	Low	Low	Retain	Establishes baseline	
Transportation System Improvements	N/A	Yes	Low	No	No	Low	Low	Do not retain	Does not meet project description/travel time	
Alternative A (I-95 ~ 2003)	No	-	Medium	Yes	No	Medium	High	Do not retain	Does not meet project description/travel time	
Alternative B (BW Pkwy ~ 2003)	No	-	Medium	Yes	No	Medium	High	Do not retain	Does not meet project description/travel time	
Alternative C (Amtrak ~ 2003)	No	-	High	Yes	No	Low	Medium	Do not retain	Does not meet project description/travel time	
Alternative D (Linthicum ~ 2003)	No	No	Medium	Yes	No	Low	Medium	Do not retain	Does not meet project description/travel time	
Alternative E (Amtrak Corridor ~ 2017)	Yes	Yes	High	Yes	Yes	Medium	Medium	Retain	Constructability is a major issue due to interruptions with Amtrak operations	
Alternative F (BWP ~ 2017)	Yes	Yes	Medium	Yes	Yes	Medium	High	Retain	Park Service impacts	
Alternative G (WBA ~ 2017)	Yes	Yes	Low	Yes	Yes	Medium	Medium	Retain	Utilizes former rail corridor	

*Project description

** Construction duration

Note: High = negative, Medium = neutral, Low = positive

Screening Level 2 Criteria

Screening Level 2 is the screening of remaining preliminary alternatives using the following criteria:

- Residences
- Low income populations
- Minority populations
- Community resources (churches, schools, cemeteries, emergency/health services)
- Commercial properties
- Historic landmarks and eligible National Register sites
- Parks (state, county, local)
- Federal lands (Patuxent, etc.)
- Ecological resources (SSPRA, critical habitat, forest conservation, and protective easements)
- Protected farmland
- Wetlands and 100 year floodplains
- Wetlands of special state concern
- Roadway crossings and closings
- Utility and infrastructure conflicts
- Operational considerations

Next Steps

- Perform Screening Level 2 analysis on Preliminary Alternatives
- Present Screening Level 2 results at May 2017 Open Houses
- Develop Alternatives Screening Report identifying alternatives for further study
- Conduct additional engineering and environmental studies of remaining alternatives, and receive input from government agencies, stakeholders, and the public
- Prepare and circulate findings in Alternatives Report that identifies retained alternatives for study in Draft Environmental Impact Statement (DEIS)
- Circulate DEIS with Preferred Alternative identified
- Conduct Public Hearings (Winter 2018)
- Continue to receive public and agency comments throughout NEPA process

Your Input is Important!

You may share your ideas or concerns with us the following ways:

- Complete and submit a comment form at this meeting
- E-mail:
info@BaltimoreWashingtonSCMaglevProject.com
- Mail comments to:

**SCMAGLEV Project
c/o John G. Trueschler, MTA
6 Saint Paul Street
Baltimore, Maryland, 21202**
- Website:
Visit **BaltimoreWashingtonSCMaglevProject.com**
for meeting materials and online comment forms

Thank you for your time.

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**Thank You
For Your
Participation!**



U.S. Department of Transportation
Federal Railroad Administration



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