The Committee of 100
on the Federal City

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September 25, 2013

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Re: Comments of the Committee of 100 on the Federal City on the Draft Environmental Impact Statement & Draft Section 4(f) Evaluation for the Virginia Avenue Tunnel Reconstruction

Dear Sirs:

Attached is The Committee of 100 on the Federal City comment on the Virginia Avenue Tunnel Reconstruction, Draft Environmental Impact Statement & Section 4(f) Evaluation. We appreciate the opportunity to submit this comment and look forward to continuing engagement on the Virginia Avenue Tunnel Reconstruction proposal.

If you would like to contact The Committee of 100, please email Monte Edwards, monte.edwards@verizon,net, or phone (202) 543-3504 .

Sincerely,

Nancy Macwood

Nancy Macwood, Chair

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COMMENTS PERTAINING TO THE

VIRGINIA AVENUE TUNNEL RECONSTRUCTION
DRAFT ENVIRONMENTAL IMPACT STATEMENT & DRAFT SECTION 4(f) EVALUATION

July, 2013

Submitted to

FEDERAL HIGHWAY ADMINISTRATION
District of Columbia Division

DISTRICT DEPARTMENT OF TRANSPORTATION
Project Development & Environment Division

THE COMMITTEE OF 100 ON THE FEDERAL CITY

September 25, 2013

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Overview

The Virginia Avenue Tunnel is functionally obsolete. Its single track creates a chokepoint for traffic along the East Coast and its inability to accommodate double-stacked containers imposes limits on freight trains traveling through DC to or from points south. CSX is proposing to rebuild the Virginia Avenue Tunnel as part of its National Gateway Project.

While the NEPA process, by law, requires consideration of a "no build" alternative, its function isn't simply to decide whether a project is necessary or unnecessary. It is to determine, after analyzing a variety of realistic alternatives, the best way to solve specific problems and/or to meet specific needs.

In this DEIS, only one approach is being considered – rebuilding the tunnel in approximately the same location, but with two tracks and sufficient clearance for double-stacking.[1] All three "alternatives" are just variations on this approach. In fact, even the "no build" option is cast in this form – the choice presented is between reconstructing the tunnel in its current location on an emergency basis (the "no build" option) rather than as a planned infrastructural improvement. The rebuilding of the Virginia Avenue Tunnel is treated as inevitable – the only real questions are when and how.

In part, the failure to consider a range of alternatives stems from an overly narrow Statement of Purpose and Needs that focuses only on CSX's needs, ignoring impacts on other users of rail infrastructure as well as the priorities established by federal and local planning efforts. The DEIS's tendency to treat the Virginia Avenue Tunnel in isolation, rather than to establish logical termini for analyzing the project compounds this problem.[2] Finally, the analysis is hampered by the absence of data that is necessary for a meaningful evaluation of the comparative costs and benefits of alternative approaches.

The DEIS, written solely from CSX's perspective, begs two crucial public policy questions: (1) is it necessary and desirable to increase the volume of "through" freight traffic in the Virginia Avenue Tunnel rather than to reroute freight traffic to avoid this chokepoint? and (2) what long-

[1] As the Capitol Quarter Community Association's comments point out, the range of alternatives is narrowed even further by the fact that all three build scenarios involve running CSX traffic along Virginia Avenue throughout the construction phase. Even the possibility of temporary re-routing or a partial diversion of current traffic has been taken off the table.

[2] See 23 CFR 771.111(f):

In order to ensure meaningful evaluation of alternatives and to avoid commitments to transportation improvements before they are fully evaluated, the action evaluated in each EIS or finding of no significant impact (FONSI) shall:

(1) Connect logical termini and be of sufficient length to address environmental matters on a broad scope;

(2) Have independent utility or independent significance, i.e., be usable and be a reasonable expenditure even if o additional transportation improvements in the area are made; and

(3) Not restrict consideration of alternatives for other reasonably foreseeable transportation improvements.

term impact will this proposed change in infrastructural capacity have on other users – specifically on passenger and commuter rail services?

Our contention is that any meaningful analysis of the environmental impact of expanding the Virginia Avenue Tunnel must consider the comparative costs and benefits of expanding the tunnel vs. rerouting freight traffic. We also believe that if such an analysis were to be done, the likely conclusion would be that now is the time to separate passenger and commuter rail from freight rail, so that we can meet our expanding needs for both services and to do so in a way that routes freight around -- rather than through -- DC's Monumental Core and population centers. Expanding rail capacity doesn't have to be a zero-sum game that pits freight against passenger and commuter rail. It is in the long-term public interest that we avoid investments that further one of those interests at the expense of the other.

We find the Virginia Avenue Tunnel Draft Environmental Impact Statement to be excessively narrow and self-serving in defining purpose and need, thus failing to consider a number of important factors:

- The importance of passenger and commuter service and the need to expand those transportation services is not considered.
- The negative effect of expanded CSX service on passenger and commuter operations is ignored.
- The safety and security considerations of expanded CSX service are not addressed.
- The effect of increased diesel emissions due to expanded CSX operations is not addressed.
- The inability of passenger and commuter rail to use electric instead of diesel locomotives to mitigate those environmental impacts because of CSX restrictions is ignored.
- Practical options for rerouting CSX that would eliminate the problems of freight, passenger and commuter rail being forced to share the same rail tracks are not evaluated.

Executive Summary

A series of drafting choices have produced a DEIS that is excessively narrow and that fails to develop a legitimate range of alternatives and to comprehensively analyze the implications of rebuilding an enlarged freight tunnel at the current Virginia Avenue location.

Most strikingly, CSX has failed to demonstrate how a downstream freight, passenger and commuter rail would be impacted by a rebuilt Virginia Avenue Tunnel.

An alternative solution to CSX's own capacity problems (and well as to other unacknowledged needs) would be to separate passenger and freight rail to enable both to expand in the future. But in this draft of the EIS, that alternative is not being considered.

We think it needs to be. What is at stake here is whether the continued shared use of the SW tracks and Long Bridge by freight, passenger, and commuter rail threatens to undermine the national and local planning goals articulated in the Federal Workplace Element of the Comprehensive Plan, the Union Station Master Plan, and the SW Ecodistrict Plan. An overarching goal (and premise) of these initiatives is that alternatives to automobility should be promoted in both transportation and land use planning and they all envision substantial increases in both passenger and commuter rail (including through-running MARC trains to Virginia).

We believe that the DEIS, as currently written, fails to provide a useful decision-making tool and that the "no build" option should be adopted until a revised DEIS that develops genuine alternatives and analyzes each in a comprehensive, detailed, and even-handed way has been issued and commented upon.

<u>The Purpose and Need Statement is Unduly Narrow</u>

The proposed rebuilding of the Virginia Avenue tunnel serves only the interests of freight rail. To provide efficient freight rail transportation service the DEIS defines the "needs" to be met as those that are exclusively related to CSX's self-interest. The detrimental impacts of the expansion on passenger and commuter rail are neither acknowledged nor evaluated in the DEIS. Nor are a series of other local and national needs related to the replacement of obsolete rail infrastructure.

<u>The Importance of Passenger and Commuter Rail is Neither Acknowledged Nor Examined</u>

The proposed solution of rebuilding the Virginia Avenue tunnel will remove a significant freight rail bottleneck, but in so doing *will very likely create a major passenger and commuter rail bottleneck on the SW rail tracks and the Long Bridge*. Expanding the capacity of the Virginia Avenue Tunnel will force passenger and commuter rail to compete with an even greater number of freight trains for use of the SW tracks and the Long Bridge, both of which are owned and controlled by CSX, and both of which are aging pieces of infrastructure. This is a scenario in which freight benefits at the expense of passenger and commuter rail. That outcome is neither desirable nor inevitable if we think ahead and consider a wider range of impacts and options.

Safety and Security Issues Are Not Addressed

Given that the Virginia Avenue tunnel will soon be obsolete for freight traffic, before investing in expanding it, we should consider whether we actually want to route significantly more freight through the Monumental Core, especially when Washington, DC is neither the point of origin for that freight nor its destination. Serious safety and security risks of freight moving through the nation's capital in close proximity to the Capitol, the Mall and numerous federal offices are not considered in the DEIS. The potential for terrorism and sabotage is not examined in the DEIS, nor is there any reference to the Transportation Security Administration's *National Strategy for Rail Transportation Security*. The tracks in Southwest Washington contain several changes from double to triple to single track operation involving switches and curves that increase the danger of derailment, particularly as the tracks become more congested with the proposed doubling of commuter and passenger rail operations and freight operations. With certain types of cargo, such a derailment would result in tragic loss of life, and unimaginable damage to our government, its institutions and memorials.

The Impact on Air Quality is Not Considered

The shared use of freight rail infrastructure means that, because of CSX restrictions, commuter and passenger trains will not be able to use currently available and unused electric locomotives that would provide significant air quality benefits.

By limiting the environmental impacts to the relatively small reconstruction area and the time frame of the reconstruction activity, the DEIS does not consider the impact on other rail operations or the emissions that CSX will produce after reconstruction of the tunnel. Airborne emissions affecting air quality will increase as the rebuilt tunnel accommodates the increase in the number of freight trains, and probably an even greater increase in the number of locomotives because the heavier double-stacked container trains will likely require double-locomotives. Nowhere does the DEIS quantify this increase in emissions or its impact on air quality.

Impacts on air quality should be included in the DEIS and CSX should be required to compute the projected level of those emissions. Such analysis is necessary to evaluate the need to reroute CSX diesel trains to reduce the level of contaminants in the downtown and in the Monumental Core areas as well as to project the level of environmental mitigation if the SW tracks were electrified.

Alternative Routing is Not Adequately Considered

The DEIS confines its consideration of the alternatives to routing freight through the Virginia Avenue Tunnel, the heavily used SW tracks and Long Bridge to the routes NCPC examined in its 2007 *Freight Railroad Realignment Feasibility Study* and simply rejects those routes. The DEIS does not explore any other pragmatic alternatives such as a Potomac River crossing from

Virginia to Anacostia (using a bridge or a tunnel), using the ROW that formerly supplied chemicals to Blue Plains, discussed more fully in Section 5. This is but one example of alternative routing that the DEIS needs to evaluate in order to separate freight from passenger and commuter rail operation.

Logical Termini Were Not Chosen

By biasing the Purpose and Needs statement to favor rebuilding the existing tunnel, and then limiting the evaluation of environmental effects to the area and time-frame of the construction activity, the DEIS fails to consider the adverse effects of the continued use of the tunnel on other parts of that alignment, including the Anacostia River Bridge and its adverse effects on boating access to the river, allowing the Anacostia channel to be dredged further upstream to facilitate greater boating use, improving neighborhood access to the river, and the fact that Anacostia Park will continue to be is divided by the approach tracks to that bridge. The failure to select logical termini has also contributed to the arbitrary limitation of alternatives under consideration and a failure to recognize the systemic effects that rebuilding the Virginia Avenue Tunnel would have on parties other than CSX.

The Section 4(f) Evaluation is Flawed

The Evaluation concedes that the temporary "use" of Virginia Avenue, a contributing element to the L'Enfant Plan, which is listed in the National Register and thus a historic site of national significance, during reconstruction and enlargement of the tunnel will not be *de minimis*, would not be minor and the use would be adverse in terms of the National Historic Preservation Act Section 106. The Evaluation fails to address the permanent use of a significant part of Virginia Avenue, because of the proposed enlargement of the tunnel beyond its present dimensions. The Evaluation did not consider the full range of feasible and prudent alternatives that would avoid "use" of Virginia Avenue. The evaluation of the alternatives that were considered in the Evaluation used the wrong standard: the biased Purpose and Needs statement that permeates the entire DEIS.

Conclusion

There is a whole segment of our rail infrastructure that is obsolete and problematic for a variety of reasons. CSX wants to fix the one piece that affects only their business, and to do so in a way that (a) is likely to commit us to decades of continued reliance on a route that should be retired and (b) not only fails to solve but actually exacerbates a number of existing problems (safety/security, disruption to urban fabric and parklands, air quality, constraints of passenger/commuter rail, navigability of the Anacostia). Everybody agrees that the Virginia Avenue Tunnel is obsolete, so why are the only two alternatives this DEIS is considering (1) wait until the tunnel starts falling apart and then rebuild it on a much larger scale in approximately the same place and (2) rebuild it now on a much larger scale in approximately the

same place? For a host of reasons, re-routing freight traffic has to be considered and considered objectively in terms of the potential costs and benefits associated with replacing our obsolete rail infrastructure.

Analysis of Purpose and Need Statement

CSX's Proposed Purpose and Need Statement Biases the DEIS

The proposed rebuilding of the Virginia Avenue Tunnel serves only the interests of freight rail. The detrimental impacts of the expansion on passenger and commuter rail are neither acknowledged nor evaluated in the DEIS.

The Purpose and Need Statement (DEIS S.3) states: "The purpose of the proposed action is to preserve, over the long-term, the continued ability to provide efficient freight transportation services in the District of Columbia, the Washington Metropolitan Area and the eastern seaboard."

To accomplish that purpose, the DEIS states that it will be necessary to meet three needs. However, some of these "needs" could be met in alternative ways and some of these "needs" fail to consider facts beyond the narrow self-interest of CSX:

Need #1. *Address the structural and operational deficiencies of the century-old Virginia Avenue Tunnel.* This is a misleading framing of the issue The current desire to rebuild the tunnel is based exclusively on capacity constraints (in light of anticipated increases in demand) rather than any concern about the tunnel's structural integrity. The DEIS implicitly acknowledges this fact when it claims that "a major structural deficiency could materialize over the next few decades, possibly due to the continued aging of the tunnel's masonry structure." (DEIS 2.1.3) This is conjecture. The DEIS notes the now-obsolete construction methods used to build the tunnel, but states that the "overall structure [of the tunnel] is in relatively good shape" (*id.*). Yes, the tunnel is old and it has drainage problems, but the DEIS specifically disclaims any near-term danger of collapse stating "the tunnel is in no danger of collapsing in part due to tunnel reinforcements and reconstruction made in late 1985 and early 1986." (*id.*).

Operational deficiencies are due to the inability of the tunnel to accommodate two-way traffic of double stacked intermodal containers in the existing one-way tunnel. The DEIS pre-empts the question of whether the deficiency should be addressed by finding an alternative to sending freight traffic through the tunnel rather than by reconstructing the tunnel.

Need #2. *Accommodate expected increases in freight transportation that, in part, would stem from the Panama Canal expansion scheduled for 2015*. This statement unreasonably limits the DEIS to the expected increases in freight transportation instead of encompassing expected increases in rail traffic generally, including passenger and commuter operations; the impact of CSX increases on their operations; the impacts of all of these increases on air quality, safety and security; and the potential to address these issues through different rerouting alignments. In addition, the estimates for construction, ranging between 30 and 66 months, put the completion

date of the Virginia Avenue Tunnel between 2016 and 2019 (DEIS, pp. 3-53). These dates do not include local and federal review and permitting time, of which the EIS process is one part. Adding the projected review and approval time to the various construction schedules, it will be some years before the Virginia Avenue Tunnel "catches up" to the potential increases in freight rail generated by the Panama Canal expansion.

Need #3. *Ensure that during construction freight transportation services remain uninterrupted while the functions of the tunnel are being replaced with a new facility*.
This is basically a restatement of the second need and goes to CSX's anticipated expansion. Existing freight transportation services would remain uninterrupted if nothing were to be done and the level of freight transportation did not increase. Even if freight transportation were to increase, CSX has alternate routings, some of which it claims to be using now for hazardous cargo that could accommodate increases in freight transportation.

<u>The DEIS's Statement of Purpose and Need Should be Revised</u>

The Statement of Purpose and Need needs to be revisited and to incorporate needs and purposes beyond the narrow interests of CSX. Additional purposes and needs worth considering include:

- Accommodate the expansion of passenger and commuter rail capacity.

- Contribute to a coordinated solution of the problems created by outmoded infrastructure – including but not limited to the Virginia Avenue Tunnel, the Long Bridge, shared tracks in SW DC, the Anacostia River Rail Bridge – rather than simply relocate chokepoints.

- Mitigate safety and security concerns related to the proximity of the current freight rail system to the Monumental Core of Washington, DC and the U.S. Capitol.

- Minimize the impact of increasing rail traffic on air quality – e.g. facilitate electrification and enable mode shifts from driving to passenger/commuter rail as well as from trucking to freight rail.

- Be consistent with other local and national planning initiatives to redevelop and repair the urban fabric in this area.

- Respect and, where possible, repair parks and natural resources by eliminating, for example, existing impediments to navigability and public access to the Anacostia River.

Logical Termini Should be Chosen

Because the Virginia Avenue Tunnel is a small piece of a larger section of aging rail structure that imposes capacity constraints, it is important to establish logical termini to ensure that proposed alternatives actually eliminate rather than relocate chokepoints. At a minimum, we would suggest that the analysis encompass shared rail infrastructure including Long Bridge, the Southwest tracks, as well as the Union Station and the Virginia Avenue Tunnel. Another possibility would be to define the termini to encompass both the Potomac and the Anacostia River rail crossings.

Separation of Freight and Passenger Operations

Expanded commuter and passenger rail service is necessary to provide commuters and travelers with viable alternative to automobile travel. Currently, such expansion is limited by constraints imposed on commuter and passenger rail operations that share CSX-owned tracks with freight rail operations.

Why Increasing Commuter Rail is Essential

The Problem: Two-thirds of the cars on DC's streets during rush hour are from out of state and those cars impose increasing demands on parking and pressures on congestion. Of US cities with more than 100,000 residents, DC has the highest daytime percentage increase in population due to commuters, and in terms of absolute numbers of people coming into the city each workday, we're second only to Manhattan.

Our car problem is largely a commuter problem.

Our major challenge is getting large numbers of people in and out of the city efficiently. And this is a problem that will only get bigger in the future. As the Metrorail system reaches capacity and starts to lose riders due to crowded conditions and unreliability, commuter rail has been gaining ridership.[3]

In terms of the percentage of those commuters using cars, trucks or vans, DC again has the highest percentage at 54%, compared to Manhattan at 13% and Boston at 50%. DC is the lowest in the use of commuter rail: DC 2.8%, Manhattan 11% and Boston 8%. Manhattan has just under three times the number of commuters coming in each day as DC does, but more than 12 times as many traveling by commuter rail.[4] Our regional transportation priorities must include a serious focus on how to expand passenger rail service into the District through MARC and VRE, as well as Amtrak.[5]

The Approach: *One obvious solution is to separate freight and passenger rail operations in Southwest by building an additional Potomac River rail crossing so the volume and imperatives of freight traffic don't constrain the growth of commuter rail.*

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[3] Kytja Weir, "Commuter trains attract riders even as numbers flag on Metro," May 29, 2013
http://washingtonexaminer.com/commuter-trains-attract-riders-even-as-numbers-flag-on-metro/article/2530789

[4] US Census Bureau, 2007-2011 American Community Survey 5-Year Estimates:

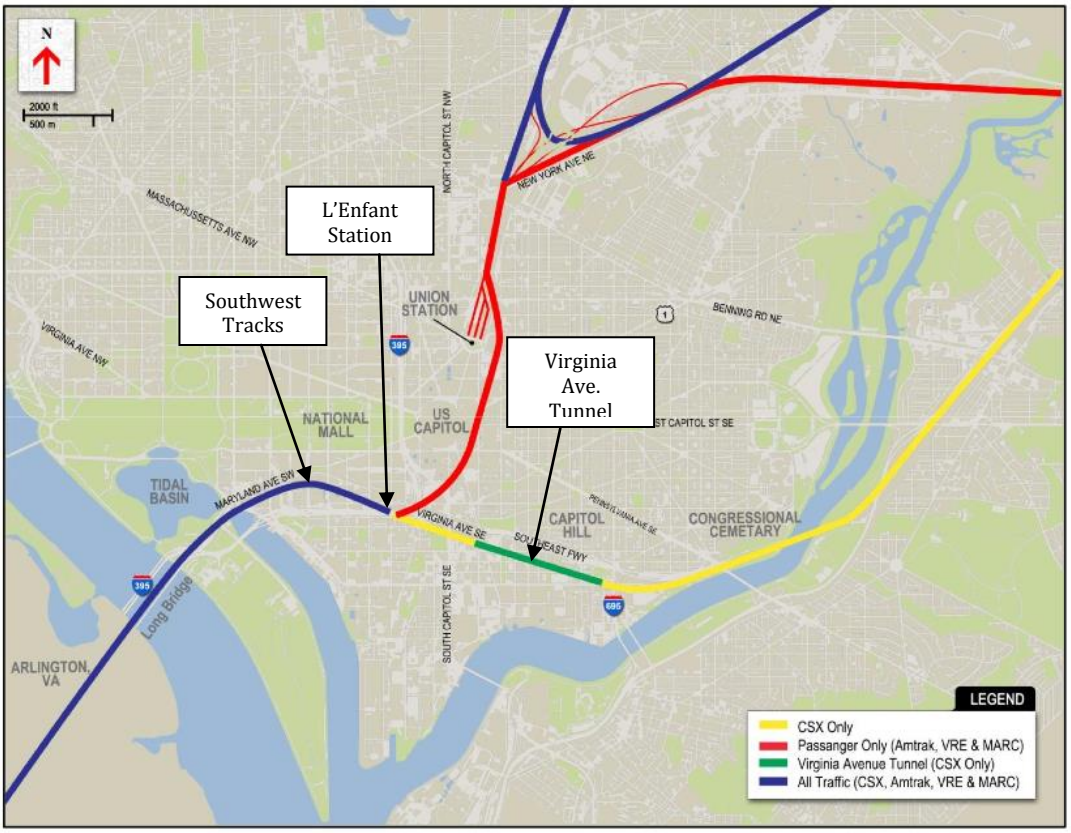
	Total Commuters	Work in Place of Residence	Commute by Car/Truck/Van	Commute by Railroad
District of Columbia	773,735	220,409	420,454	21,523
Manhattan	2,334,100	769,884	321,070	270,690
Boston	555,227	209,100	278,990	44,295

Continued Investment in the Virginia Avenue Tunnel Will Compromise Commuter and Passenger Rail Service

CSX uses the SW tracks to access the Virginia Avenue Tunnel. Passenger and commuter trains use those same SW tracks to access Union Station. The rail tracks from Virginia are double-tracked across the Long Bridge, until they reach 12th Street SW where they become triple-tracked, with double-tracks for passenger and commuter trains branching off to the north to Union Station through the First Street Tunnel. At Twelfth Street, double tracks for freight trains continue east until they become a single track entering the Virginia Avenue Tunnel.

These SW tracks provide the **only** means for passenger and commuter trains to access Union Station from the south and for trains originating at Union Station to travel south.

Active Rail Lines within the District of Columbia



To the extent that rebuilding the Virginia Avenue Tunnel will result in additional CSX trains using the SW tracks, it will limit the expansion of passenger and commuter rail options running south of Union Station. If the number CSX trains increases substantially, reconstruction of the tunnel may even force a decrease in commuter and passenger rail service.

VRE's expansion is already being limited by its agreement with CSX – at this point its rush hour trains are filled to capacity and typically have standees, trains are as long as existing platforms allow, and bi-level cars are in use. Thirty-six of forty slots allocated to VRE are currently in use, which means that only one more round-trip train can be added to each of the two routes that operate along this route.[6] MARC, too, has seen the expansion of its Brunswick line constrained by CSX.[7] Both locally and nationally, CSX's leadership has been quite vehement that it will resist any passenger rail proposals that threaten its own bottom line:

> CSX Corp. CEO, President and Chairman Michael Ward told Bloomberg News yesterday that he "can't be part of" President Barack Obama's push for high speed rail.
>
> Ward said high-speed passenger rail service won't make enough money and freight rail systems can't withstand trains moving as fast as 110 mph. Class I railroads have expressed concern over high-speed rail's impact on their freight rail systems, but Ward's recent criticism takes a more aggressive stance.
>
> "I'm a corporation. I exist to make money, OK?" Ward said. "You can't make money hauling passengers, so why would I want to do that? That wouldn't be fair to my shareholders."[8]

If we want to expand both freight and commuter/passenger rail capacity, then dedicated tracks, with the level of service optimized for each use, should be provided. Faced with a similar situation in Baltimore, and armed with sufficient funding to study the issue comprehensively, the Federal Railroad Administration concluded that "In the environment of Baltimore's topography and development patterns, the needs of freight and passenger service differ so greatly as to mandate separate freight and passenger facilities."[9]

How Shared Infrastructure Constrains Passenger and Commuter Rail Service

The constraints that restrict increasing commuter and passenger rail because of the shared tracks in SW are considerable:

• A Single River Crossing for All Rail Users. Currently, freight, passenger and commuter trains share the double-tracked Long Bridge, the only Potomac River rail crossing within 70 miles, as well as rail tracks in Southwest (SW). According to the National Capital Region Transportation Planning Board, two-thirds of the traffic on the Long Bridge is passenger or commuter rather

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[6]Parsons Brinckerhoff, *VRE System Plan Operations Board Workshop Summary Report*, August 2013, pp.2, http://www.prtctransit.org/docs/commission/Sep2013/Item_10C_VRE_Info--VRE_System_Plan_Operations_Board_Workshop_Summary_Report_(08-13).pdf

[7] Michele Whelley, "MARC: Rolling in the Right Direction," *The Baltimore Sun*, May 26, 2013; http://articles.baltimoresun.com/2013-05-26/news/bs-ed-marc-expansion-20130526_1_marc-penn-line-camden-line-marc-service

[8] Mark Szakonyi, "CSX CEO Ward rejects high-speed rail," *Jacksonville Business Journal*, April 7, 2011 http://www.bizjournals.com/jacksonville/blog/trade_trucks_trains/2011/04/csx-ceo-ward-rejects-high-speed-rail.html

[9]Federal Railroad Administration, *Report to Congress: Baltimore's Railroad Network (2005), Part II: Alternatives,* p. 9-3. http://www.fra.dot.gov/eLib/Details/L04159

than freight rail.[10] And the SW tracks reflect this balance – after the Bridge, the route is triple-tracked, with two tracks providing passenger and commuter train with access to Union Station and the third track providing freight trains access to the single-tracked Virginia Avenue Tunnel.

• CSX-Imposed Schedules. The current operating agreement for the Potomac River rail crossing at the Long Bridge precludes any increase in the frequency of VRE commuter trains. In the future, with the increase in freight traffic, the competition for rail crossings will only increase. Unfortunately, CSX has consistently declined to disclose their expected increase in freight traffic and the amount of additional river crossing capacity that is available on the Long Bridge as currently configured.[11] In the absence of that data it is reasonable to conclude that the increased traffic on the Long Bridge will be to CSX's benefit and the detriment of passenger and commuter rail.

• CSX-Dictated Motive Power. MARC's Penn Line is electric, the Brunswick and Camden Lines (which operate on CSX tracks) are diesel and VRE is diesel (as required by CSX). Because of the lack of electric catenaries along the CSX-owned SW tracks, Amtrak must change locomotives at Union Station to use diesel to the south and electric to the north, losing time, delaying passengers and prolonging service times. Electrification of the tracks south of Union Station is environmentally desirable for passenger and commuter trains, but opposed by CSX because of possible interference with their planned double-stacked container trains.

• CSX-Controlled Track and Operations. CSX designs their rail lines for freight loads, not for passenger loads. Freight operations are typically slower and less time-critical than passenger rail. As a result, signaling, scheduling, platforms, speed and logistics generally are optimized for CSX's freight operations.

Can Shared Infrastructure Handle Significant Simultaneous Increases in Both Passenger and Freight Rail Operations?

In 2005, the Federal Railroad Administration estimated that the number of CSX trains traveling between Washington and Baltimore would increase from 33 trains a day in 2012 to a high of 56 trains a day in 2050.[12] In the same time frame, the Union Station Master Plan proposes to triple

[10]Karin Foster, Memorandum re 2013 TPB Freight Transportation Highlighted Projects, dated 18 September 2013, p. 12. http://www.mwcog.org/uploads/committee-documents/a11aXFZf20130912133457.pdf

[11]According to the FHWA, this is precisely the sort of data that NEPA analysis requires: "[r]ather than simply stating that additional capacity is needed between two points, information on the adequacy of current facilities to handle the present and projected traffic (e.g. What capacity is needed and the level of service for the existing and proposed facilities) should be discussed." *NEPA and Transportation Decisionmaking: The Importance of Purpose and Need in Environmental Documents*, http://environment.fhwa.dot.gov/projdev/tdmneed.asp

[12] This projection did not take into account the increased freight traffic that would result from expansion of the Panama Canal. So 56 CSX trains a day is a conservative estimate of future freight demand. *Report to Congress: Baltimore's Railroad Network,* p. 4-13.

the number of passengers and double the number of passenger and commuter trains[13] and the SW Ecodistrict Plan proposes through-running MARC trains to Virginia and increasing the number of commuter trains using L'Enfant Station.[14] The combined pressure of increased freight and passenger/commuter rail demand seems likely to overwhelm the carrying capacity of the Long Bridge and the SW rail tracks. Since those facilities are owned by CSX, it is likely that CSX will resolve that competition in its own favor and thereby frustrate the proposed increases in Amtrak, VRE, and MARC service.

Why the EIS Should Consider the Implications for Passenger and Freight Rail, as well as Freight Rail in its Analysis of Whether the Virginia Avenue Tunnel Should be Reconstructed

The current balance between freight and passenger/commuter rail operations on the CSX-owned shared-use infrastructure south of Union Station is an artifact, in part, of the limitations on freight rail capacity imposed by the current configuration of the Virginia Avenue Tunnel. Even with that constraint on freight volume in place, VRE's access to this infrastructure is already being rationed. Quadrupling the capacity of the Virginia Avenue Tunnel, without coordinated increases in the capacity of the Long Bridge and the SW tracks creates the very real possibility that CSX will satisfy its own needs for increased rail capacity at the expense of other rail users.

This is why it is important to revise the DEIS to include a more comprehensive statement of needs, a broader range of alternatives, a larger segment of rail infrastructure, and more detailed and relevant data. Looking solely at the Virginia Avenue Tunnel, exclusively from the perspective of freight rail, turns the NEPA process into a pointless exercise rather than a useful decisionmaking tool.

[13] *Union Station Master Plan*, Washington, DC (July 25, 2012), Executive Summary, page 2.

[14] The recently adopted *Southwest Ecodistrict Plan* proposes transportation strategies to revitalize and reconnect the community that will "build on existing road, rail and bus infrastructure to enhance transportation capacity … and better connect all modes of travel." (Page 13) The SWE Plan builds on the District's Maryland Avenue SW Small Area Plan through an expanded L'Enfant commuter rail station that will serve VRE, MARC, and Amtrak commuters.

Safety and Security Issues

The DEIS fails to address two serious safety and security considerations from increased rail freight in close proximity to the US Capitol, the Mall and numerous federal offices.

A Train Derailment, or an Accidental Spill Could Lead to a Catastrophic Event

CSX is required to select the "safest and most secure routes" for its most dangerous cargos, generally defined as substances posing a poison or toxic inhalation hazard, explosives, and radioactive materials (49 CFR Parts 171-180) and providing alternate routes for hazardous materials. However, CSX unilaterally makes the decision about what material should be rerouted and applies its own weighting to the federal designated "routing factors" that include security, safety and economics. The decision is made without public disclosure.[15] Nor does the Federal Railroad Administration (FRA) have authority to approve the railroad routing decisions or to override them. FRA's oversight of the freight routing decisions is merely to evaluate the railroad's routing choices after they have been implemented.

CSX's unilateral decision-making presents the possibility of human error in identifying, classifying or handling materials that are dangerous or hazardous. As we will see below, all of these errors can result in great harm. CSX has provided assurances that the most dangerous substances are not routed on the SW tracks and through the Virginia Avenue Tunnel; however, there are several types of less dangerous or potentially dangerous cargo that CSX has determined do not require rerouting, including denatured alcohol, terephthalic acid, fluorolytic acid and sodium chlorate. These, and other materials may be transported through Washington. The possible occurrence of human error together with outmoded running stock, including the DOT-111 tank car creates a volatile mix that has resulted in disastrous damage in recent derailments in other locations as close as the city of Baltimore.

Let us consider several recent derailments and their consequences:

> *The Lac-Maginet Derailment*: On July 6, 2013 a petroleum train derailed in Lac-Maginet, Quebec, resulting in catastrophic explosions and fire that claimed the lives of 47 people and destroyed roughly half of the downtown area.[16] The tank cars carrying the oil were DOT-111

[15] The procedures of Circular No.OT-55-L, December 13, 2010 limit the disclosure of information. Upon written request, AAR members will provide bona fide emergency response agencies or planning groups with specific commodity flow information covering at a minimum the top 25 hazardous commodities transported through the community in rank order. The request must be made using the form included as Appendix F by an official emergency response or planning group with a cover letter on appropriate letterhead bearing an authorized signature. **The form reflects the fact that the railroad industry considers this information to be restricted information of a security sensitive nature and that the recipient of the information must agree to release the information only to bona fide emergency response planning and response organizations and not distribute the information publicly in whole or in part without the individual railroad's express written permission.** [Emphasis added]

[16] Petroleum spills from tank cars are not uncommon. An analysis of U.S. Transportation Department data found less than one incident of oil spills involving pipelines per billion ton-miles, compared with 19.95 incidents per billion ton-miles for trains.

cars, known for their tendency to split open during derailments.[17] It should be noted that approximately 70% of the US tank car fleet is composed of DOT-111 tank cars. Such a split occurred in Lac-Maginet causing five of the tank cars to explode, setting off massive explosions and fires fueled by the contents of other rail cars.

The Cherry Valley Derailment: On June 19, 2009 a Canadian National Railway train carrying denatured alcohol derailed at a grade crossing in Cherry Valley, Illinois. Of the 19 DOT-111 tank cars that derailed, 13 of them ruptured and caught fire. The resulting fire engulfed several motor vehicles stopped at the crossing, resulting in personal injuries, including one fatality, a mandatory evacuation within a half-mile radius and property damages estimated at $7.9 million dollars. The NTSB noted the history of rupture problem with the DOT-111 tank cars, and described the demonstrated need for extra protection such as heat shields, tank jackets, more robust fittings and other modifications. At the time of the Cherry Valley derailment, the American Association of Railroads (AAR) opposed modification or retrofitting of existing tank cars but has increased the crashworthiness of newly constructed DOT-111 tank cars. The DOT-111 tanks cars, identical to those in the Lac-Maginet derailment,[18] remained in service.

The Cherry Valley Derailment: Pipeline Damage: An additional hazard at the site of the Cherry Valley derailment was a 12-inch diameter underground natural gas transmission pipeline, installed deeper underground that required by industry standards and exceeding federal standards. Although it was 11 feet underground (deeper than required by standards), and protected inside a 16-inch diameter casing, during the derailment a railcar wheel and axle deformed the casing and caused damage to the pipe. The NTSB concluded that if the pipeline had been installed with minimum cover, it would have been ruptured as a result of being struck by the derailed equipment, and contributed high-pressure natural gas to the fire. The NTSB explained that while data is not collected about the number of incidents in which pipelines are damaged by train derailments, this and other derailments illustrate that pipelines can and have been damaged when present near railroad accident scenes.[19] The inherent dangers posed by the rupture of several gas lines in the vicinity of the proposed Virginia Avenue Tunnel reconstruction (DEIS, pp. 5-56) in the dense urban environment of Washington DC is unacknowledged and unaccounted for in the DEIS. Nowhere in the EIS is there any description of the gas, electric and other utility lines that presently exist under the SW tracks or the Virginia Avenue Tunnel. The DEIS needs to list all such lines, the nature

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While pipelines spill more oil in absolute numbers because of the nation's vast pipeline network -- an average of 6.6 million gallons of petroleum products were released accidentally from pipelines each year from 2005 to 2009 -- during the same period road transportation spilled an average 477,600 gallons a year and trains spilled 83,800 gallons. http://fuelfix.com/blog/2013/07/15/canada-train-disaster-could-inspire-new-us-regulations/

[17] http://www.pressherald.com/news/Obama-administration-delays-oil-train-safety-rules.html?pagenum=full

[18] National Transportation Safety Board, Safety Recommendation, March 2, 2012. Pages 1-9 (copy attached).

[19] *Id.,* pp. 9-10.

and extent of the productive conduit in which they are encased and the depth they are located below the tracks.

The Cherry Valley Derailment: Identifying Hazardous Cargo: The Cherry Hill derailment also underscores the high cost of human errors in correctly identifying hazardous materials. Train operators are required to have a "train consist" that accurately identifies the hazardous or dangerous cargo and the position of the rail cars containing hazardous cargo. The train consist for the Cherry Valley train had only 3 of the 76 cars in their proper position.[20] The NTSB report did not address the error rates for CSX or other train operators, but it clearly demonstrates that human error can and does occur in administering the Hazardous Materials Regulation.

The Rosedale Derailment: On May 26, 2013 a CSX train (traveling from Selkirk, NY to Waycross, GA, along CSX's Eastern Seaboard Freight Rail Corridor that includes the Virginia Avenue Tunnel) carrying sodium chlorate, terephthalic acid and a partially empty tank car containing fluorolytic acid derailed in Rosedale, Maryland, a Baltimore suburb. This derailment resulted in a fire and explosions that were felt and heard across Baltimore. Billowing smoke could be seen for hours and resulted in road closures.[21] Fortunately, damage was limited because the derailment occurred in a rail yard. However, the event underscores the dangers of certain materials that, evaluated individually, CSX apparently considered to be safe enough to transport though densely populated areas. Yet when these materials interacted, they created an explosion of the sodium chlorate that in turn ignited the terephtalic acid that fueled the long burning fire.[22]

Terrorism Remains a Threat

The Transportation Security Administration has recognized that a terrorist attack on freight rail could have a devastating impact on the nation's economy. Such an attack could cause a tragic loss of life and have a catastrophic impact on the operation of the American government as well.[23] Unfortunately, the DEIS does not assess the consequences of a terrorist attack.

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[20] *Id*., p. 10

[21] http://www.usatoday.com/story/news/nation/2013/05/28/train-derails-in-maryland-explosion-reported/2366957/.

[22] http://www.cnsnews.com/news/article/csx-md-train-explosion-caused-chemical-cargo

[23] TSA has developed a national strategy for rail transportation security outlined below:
Goal 1: Prevent and deter acts of terrorism using, or against, the transportation system.
Terrorists may use attacks to directly disrupt the freight rail transportation system or use the cargo transported by a railroad to carry out larger attacks against the American people. The Sector aims to prevent and deter terrorist attacks before they happen without disrupting the free flow of commerce or compromising civil liberties.
Goal 2: Enhance the all-hazard preparedness and resilience of the global transportation system to safeguard U.S. national interests.
The resilience of the freight rail sector can be improved by increasing its ability to accommodate and absorb damage from natural disasters or terrorist attacks without catastrophic failure. Resilience-improving strategies include a wide variety of mitigation activities, including support of response and recovery activities.

The DEIS must address how rebuilding the Virginia Avenue Tunnel and the associated increase in the volume of freight traffic contribute to increased national security threats, both from sabotage of trains and from explosives in container cars or concealed cargo like the Cuban anti-aircraft missiles hidden in intermodal containers in a North Korean vessel going through the Panama Canal. Worst-case scenarios should be an important, if not decisive, component of the DEIS analysis.

Conclusion

Future congestion on the SW rail tracks, and the greater speed that will be allowed in an enlarged tunnel,[24] increase the risk of derailment. In addition, double-stacked container trains increase both the odds that a critical mass of harmful material will occur more frequently and the potential magnitude of damage. Lessons from other derailments underscore the real-world risks of fatalities, massive fires, explosions or other catastrophic events. There are the separate and real possibilities of acts of terrorism and sabotage that could result in a tragic loss of life and have a catastrophic impact on the operation of the American government as well.

All of these considerations lead to the conclusion that these most important topics for the health, life and safety of residents, visitors and workers in metropolitan DC have been inadequately considered in the DEIS.

Goal 3: Improve the effective use of resources for transportation security.

[24] Currently the speed in the tunnel is limited to 15 mph, but outside the tunnel (and presumably after reconstruction) the speed is 40 mph (DEIS p. 2.5).

Air Quality

Diesel train operations have a negative and measurable effect on air quality. And an increase in the volume of rail freight being transported through the District of Columbia will lead to an increase in emissions and degradation of air quality.

The DEIS fails to include any calculations regarding such long-term impacts.

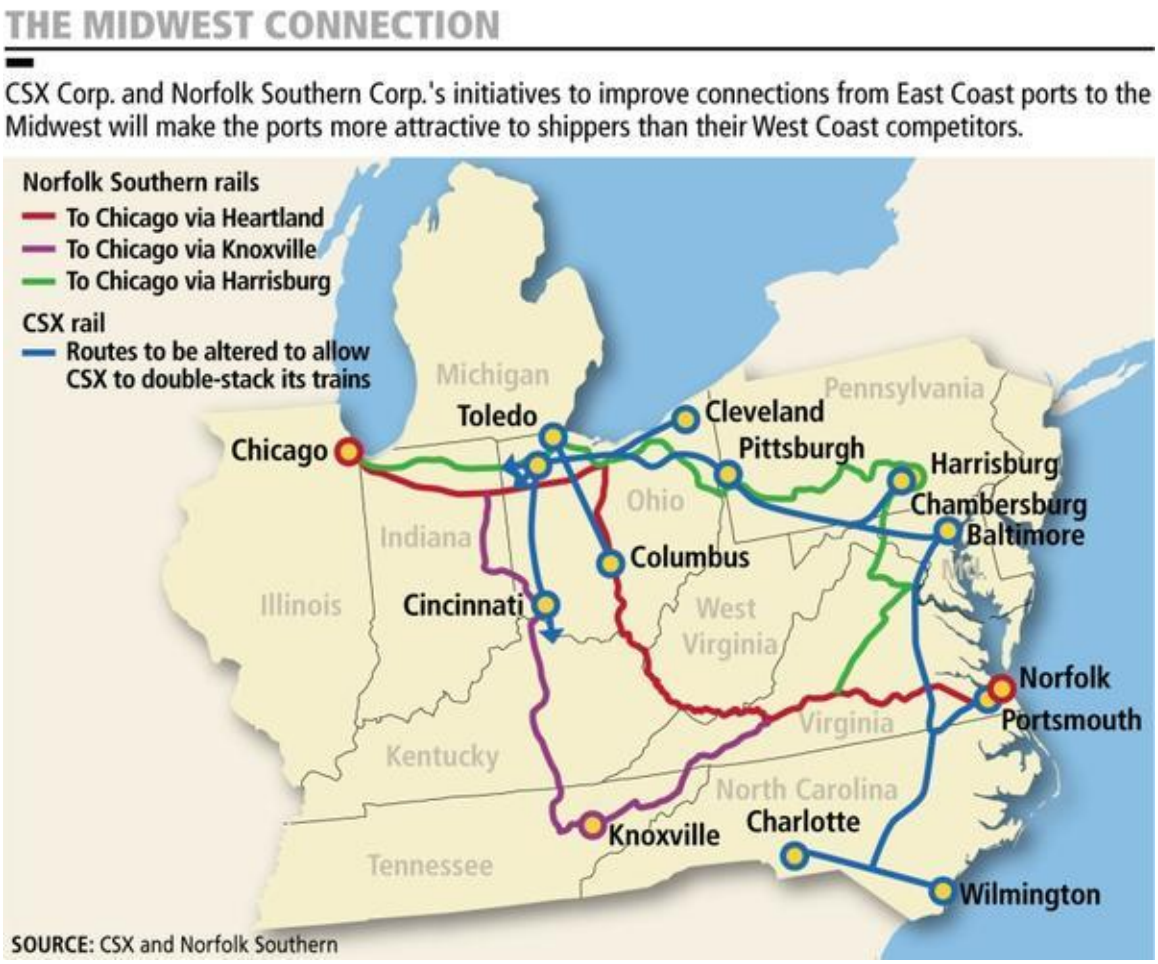
There is no reason to assume that the volume of freight entering Washington, DC would be the same regardless of whether the Virginia Avenue Tunnel is rebuilt. While CSX has failed to provide any data regarding anticipated increases in freight volume,[25] it is proposing to quadruple the volume of freight that can travel through the District by rail. CSX has not provided any data indicating what percentage of this traffic either originates from or has a final destination in the Metropolitan Washington area. This omission subverts the NEPA process which is designed to gather the information necessary to make an objective assessment of the relative costs and benefits of a variety of approaches to solving a problem.

In point of fact, the impetus behind the National Gateway Project (under which the proposed tunnel rebuilding falls) is to create improved connections between East Coast ports and Midwestern markets on CSX-controlled routes – i.e. to improve and upgrade the freight carrying capacity on CSX lines. The vast majority of this freight will be "through traffic" – which should raise the question of whether it is desirable to route significantly more freight through Washington DC's Monumental Core and densely-populated neighborhoods along capacity-constrained infrastructure that is shared with highly successful passenger and commuter rail services.

And it is disingenuous to suggest (or assume) that trucking is the only alternative. Norfolk Southern operates freight rail services that connect the same markets without sending cargo through Washington, DC or along the congested Northeast Corridor. [See the route map on the page following.] And CSX itself ships hazardous materials using an alternative route.

Moreover, continued reliance on an expanded Virginia Avenue Tunnel degrades local air quality both by constraining the expansion of popular commuter rail services in a growing economy and by preventing electrification of intercity passenger and commuter rail to and from points south of

[25] As FHWA states in *NEPA and Transportation Decisionmaking: The Importance of Purpose and Need in Environmental Document,* "[R]ather than simply stating that additional capacity is needed between two points, information on the adequacy of current facilities to handle the present and projected traffic (e.g. what capacity is needed and the level of service for the existing and proposed facilities) should be discussed" and then explicitly concludes that "It is not sufficient to state that the project is needed to provide increased capacity and improve safety. Supporting data must be provided."



http://www.bizjournals.com/jacksonville/stories/2009/10/19/story8.html?s=image_gallery

Washington, DC. From an environmental perspective, getting freight out of trucks and onto trains in a way that keeps commuters in cars and off of trains could be a Pyrrhic victory, even if it enhances CSX's bottom line. Similarly, while the DEIS recognizes diesel rail's environmental superiority to trucking, it also needs to acknowledge that electric rail would be preferable to diesel and that the expansion of diesel traffic on CSX-owned and controlled shared rail infrastructure prevents electrification of these tracks for other users.

Quantifying Airborne Emissions

The DEIS takes an arbitrarily narrow view of the impacts of rebuilding the Virginia Avenue Tunnel by limiting the analysis only to impacts that may occur during construction of the tunnel. The appropriate time frame should encompass the expansion of the Panama Canal, the planned Union Station expansion and implementation of the SW Ecodistrict Plan. Neither the Union Station Master Plan for expansion, nor the SW Ecodistrict Plan, is even acknowledged in the DEIS.

CSX Rail Operations are Likely to More Than Double

CXS is currently running 20-30 trains over the SW tracks and through the Virginia Avenue Tunnel (DEIS, p.2-7). CSX has not provided long term projections of the number of trains that CSX will likely operate after the tunnel is rebuilt and after CSX begins to carry the increased freight that will result from the Panama Canal expansion, other than the general statement (DEIS p. 2-5):

> According to the FHWA's 2011 Freight Analysis Framework (FAF) forecasts, overall freight tonnage would increase by 50 percent in 2040 from 2010 levels.

This is not a projection of the increased freight that CSX will carry. With the Panama Canal expansion, and the fact that initially only the New York/Newark, Baltimore, and Newport News ports will be able to accommodate those larger container ships, a substantial part of the increased freight will travel over the CSX tracks. (DEIS p.2-6):

> As the largest freight railroad company on the east coast, CSX is anticipating the impact of the expanded Panama Canal on freight transportation demand from east coast ports, and is anticipating the need to carry a greater amount of freight between east-coast ports and Midwest markets.

But CSX does not quantify that increase on "freight transportation demand" and has elected not to provide information about the number of CSX trains that are projected over the SW tracks and through the Virginia Avenue Tunnel after the Panama Canal expansion is completed[26] when the number of CSX trains is likely to exceed 56 a day.[27] The estimate of 56 trains is based on CSX's 2005 growth prediction, without considering the Panama Canal expansion. It is an understatement of what will probably happen after CSX begins carrying increased freight when the larger container ships begin arriving at Newport News, Baltimore and Newark/New York beginning in 2015. But, that freight increase, being supplied by ships delivering intermodal

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[26] Submitted May 21, 2012 On Behalf of the Committee of 100 and available on the Virginia Avenue Tunnel website (http://www.virginiaavenuetunnel.com/public-involvement/):

Requests For Information

1. What is the projected number of trains that will traverse the tunnel each day (north/south) after the tunnel is completed? Five years after completion?
2. What is the amount of fuel consumed to cross from the Potomac to the Anacostia for an average freight train?
3. What is the average emissions of the CSX locomotive fleet to pull an average freight train in terms of units of NOx and particulates and other emissions expressed per unit of fuel and per mile at the speeds the trains will traverse the tunnel after it is rebuilt?

Response:

CSX : CSX is not allowed to respond to such requests until they have been approved by DDOT.

DDOT: The requests are outside the scope of the proceeding.

[27] In 2005, the Federal Railroad Administration issued its Report to Congress: Baltimore's Railroad Network: Challenges and Alternatives, and projected that the number of CSX trains traveling between Washington and Baltimore will increase from 33 trains a day in 2012 to a high of 56 trains a day in 2050. Page 4-13. This projection, performed in 2005, did not take into account the increased freight that will result from expansion of the Panama Canal.

containers, would likely be carried by CSX on double stacked container trains, resulting in heavier loads, requiring double locomotives. Even today, a large number of the CSX trains coming through our City use double locomotives. For the purpose of estimating diesel emissions, the relevant unit is the number of locomotives rather than of trains.

The Number of Commuter Rail and Amtrak Trips Is Projected to Double

The goal of the Union Station expansion is to triple the number of riders and double the number of passenger and commuter trains using the station.[28] The southbound tracks at Union station will be designed for expanded commuter rail as well and Amtrak's Superliner and the tracks will be equipped with an overhead catenary system to accommodate electric locomotives (*USMP,* page 11). Between 2018 and 2022, all new tracks will run through the First Street tunnel to points south of DC (*id*. page 22). Additional future tracks could be extended to the south, enabling extension of high-performance, high-speed rail service to Virginia, North Carolina and the southeastern United States (*id.* page 13).

A cornerstone of the recently adopted Southwest Ecodistrict Plan is to through-run MARC service from Maryland to Virginia and to increase the number of commuter and Amtrak trains using L'Enfant Station. The Plan relies upon these transportation strategies to revitalize and reconnect the community[29] The SWE Plan builds on the District's Maryland Avenue SW Small Area Plan through an expanded L'Enfant commuter rail station that will serve VRE, MARC, and Amtrak commuters with convenient access to the L'Enfant Plaza Metro Station's Blue/Orange and Yellow/Green Line service (*SWEP*, page 31).

The DEIS Needs to be Revised to Estimate Airborne Emissions Associated with an Expanded Range of Alternatives, Including the Separation of Freight and Passenger/Commuter Rail with Freight Rail Re-Routed Outside the Monumental Core

The estimates should be based on the following information:

- Projected Increases in Freight, Passenger and Commuter Rail Services
- Number, Types, and Ages of Locomotives and Associated Airborne Emissions
    - Where Possible, Make Short-Term Calculations Based on Existing Fleet
    - Emissions from Passenger and Commuter Rail Services Should be Computed for Both Diesel and Electric Locomotives

[28] *Union Station Master Plan*, Washington, *DC*, July 25, 2012, Executive Summary, page 2.

[29] The plan is to increase the number of jobs and residents and to "build on existing road, rail and bus infrastructure to enhance transportation capacity … and better connect all modes of travel." (Page 13)

        - Where Electrification is Assumed, Include Emissions Associated with the Generation of Electricity

- Estimated Travel Times for Each Type of Service

- Increases in Automotive VMT and Associated Emissions if Commuter Rail Growth is Constrained

- For Alternatives Involving Re-Routing:

    - Baseline Air Quality
    - Population Subject to Exposure
    - Environmental Equity Analysis[30]

Air Quality Benefits of Rerouting CSX

Studies that have been done about concentrations of vehicle emissions near major highways also apply to the diesel emission levels from trains traversing the SE tracks and the Virginia Avenue Tunnel. There is substantial documentation that people living or otherwise spending significant time within 200 meters +/- of major highways and freeways are exposed to freshly-emitted air pollutants of particulate matter, oxides of nitrogen and carbon monoxide more so than persons living at a greater distance, even compared to living on busy urban streets. Relative concentrations of these airborne emissions decrease exponentially between 17 and 150 meters downwind from the highways, while at 300 meters measurable emissions concentrations were the same as at upwind sites.[31] An Australian study observed that the distance from highways at which concentrations of airborne pollutants created by vehicles using the highway decreased by 50% varied from 100 to 375 meters depending on the wind speed and direction.[32]

Rerouting CSX trains away from the SW tracks and the Virgina Avenue Tunnel would result in dilution of the airborne emissions proportionate to the distance of the relocation. Relocating he CSX tracks more than 1,000 feet to the east would mean lower levels of diesel emission and less harmful effects to the residents, workers and visitors as well as harm to the limestone and marble of the Capitol, the Mall and government buildings that are adjacent to the SW tracks and the Virginia Avenue Tunnel.

The Implications of These Airborne Pollutants

[30] See, e.g,. NCPC and DDOT, *Freight Railroad Realignment Feasibility Study: Securing Freight Rail Transportation in the National Capital Region*, April 2007, pp. ES-8 and 9 and pp. 67-71.

[31] http://www.ehjournal.net/content/6/1/23

[32] Hitchins J, Morawska L, Wolff R, Gilbert D. Concentrations of submicrometre particles from vehicle emissions near a major road. Atmospheric Environment. 2000;34:51–59. doi: 10.1016/S1352-2310(99)00304-0.

Nitrogen Oxides (NOx) are a key precursor to ozone and secondary Particulate Matter (PM) formation. As the EPA explained in evaluating the comments about adopting the now current Locomotive emissions standards[33]:

> Ozone and PM2.5 are associated with serious public health problems including premature mortality, aggravation of respiratory and cardiovascular disease, aggravation of existing asthma, acute respiratory symptoms, chronic bronchitis, and decreased lung function. These engines also emit hazardous air pollutants or air toxics, which are also associated with serious adverse health effects. These engines emissions are of particular concern, as exposure to diesel exhaust has been judged likely to pose a lung cancer hazard for humans as well as a hazard from non-cancer respiratory effects.

The area in the vicinity of the Virginia Avenue Tunnel and the SW rail tracks is currently a maintenance area for CO, a marginal nonattainment area for O3 and a nonattainment area for PM2.5 (DEIS page 4-35).

Nitrogen Oxide emissions also pose threats to natural resources and to the built environment. The EPA provided the following summary[34]:

> The Northwest Environmental Defense Center, et al. noted that recent Forest Service studies have shown that NOx and other emissions from sources in and around the Columbia River Gorge contribute to acid rain formation, resulting in damage to crops, ecosystems, and cultural artifacts, including ancient Native American rock images.

The limestone and marble buildings on the Mall, as well as other federal buildings, are adjacent to the SW tracks and the Virginia Avenue Tunnel, and the U.S. Capitol is only four blocks away.

As EPA has noted:

> The deposition of airborne particles can reduce the aesthetic appeal of culturally important articles through soiling, and can contribute directly (or in conjunction with other pollutants) to structural damage by means of corrosion or erosion.[35]

Reducing the emission of NOx will benefit the air quality in terms of the health of workers and residents in the area as well as visitors to the Mall and preservation of the limestone and marble memorials and museums of the Mall and the U.S. Capitol.

Conclusion

[33] EPA420-R-08-006 March 2008, page 2-1 to 202

[34] Id. at 2-15

[35] Id at 2-18.

Dedication of the SW tracks and the Long Bridge for use only by passenger and commuter rail will allow electrification of those tracks. The emissions associated with the amount of electric generation to power those locomotives should be far less than the emissions associated with using diesel locomotives to move commuter and passenger trains. By rerouting CSX trains away from the Monumental Core, freight emissions will be diluted to the point that their harmful effects would be greatly reduced by the time they reach the Mall, the Capitol and the downtown area.

Identifying Alternative Routes

The Virginia Avenue Tunnel is a product of late-19th century decisionmaking about appropriate locations for rail facilities. It is one of the last remnants of a time when trains ran up and down the national Mall. Now that even its owner acknowledges that this tunnel is obsolete and no longer meets CSX's needs, the Committee of 100 believes that it is imperative that we re-examine the question of location as we update our rail infrastructure to prepare for 21st century technology and traffic volumes.

The fact that the DEIS, as currently written, has not fully evaluated any re-routing alternative renders it a pointless bureaucratic exercise rather than a useful comparison of the environmental costs and benefits associated with a range of possible solutions to the problem of capacity constraints imposed on rail service by antiquated infrastructure. In both DC and Baltimore, when independent agencies looked comprehensively at this issue their conclusion was that separating freight rail from passenger and commuter rail was an essential step toward creating a rail system that can meet future needs.[36]

Yet this draft EIS summarily dismisses that possibility and starts from the premise that the only alternatives worth considering are those that involve substantial reinvestment in perpetuating a system that is already proving unworkable. Rather than assume that the only approach to solving the problems posed by the Virginia Avenue Tunnel is to make the Tunnel bigger, the DEIS should fully evaluate a different possibility – that abandoning the Virginia Avenue Tunnel, separating freight and rail traffic, and re-routing most freight traffic around rather than through the center of the city may be the most environmentally responsible approach.

The DEIS's failure to develop and analyze genuine alternatives (rather than minor variations on a theme) stems from four fundamental flaws in this NEPA process thus far:

- An unduly narrow Statement of Purpose and Need, which ignored the interests of stakeholders other than the applicant (CSX)

- An exclusive focus on the Virginia Avenue Tunnel, and a corresponding failure to define logical termini – which FHWA warns is likely to result in a project that will "cause unexpected side effects" and/or "only peripherally meet project needs"[37]

[36] See National Capital Planning Commission and District Department of Transportation, *Freight Railroad Realignment Feasibility Study: Securing Freight Rail Transportation in the National Capital Region*, April 2007, pp. 101-02; and Federal Railroad Administration, *Report to Congress: Baltimore's Railroad Network (2005), Part II: Alternatives*, p. 9-3. http://www.fra.dot.gov/eLib/Details/L04159

[37] *NEPA and Transportation Decisionmaking: Development and Evaluation of Alternatives*, http://environment.fhwa.dot.gov/projdev/tdmalts.asp

- The absence of the specific data necessary to evaluate project costs, benefits, and needs. (e.g. current and projected traffic volumes, infrastructural capacity, origins/destinations of freight traveling through Washington DC)

- A largely a-contextual approach to project evaluation, rather than an assessment of compatibility with other relevant local and national transportation and land use planning initiatives.

Rerouting Concepts Have Been Summarily Dismissed

CSX is only interested in looking at scenarios that involve expanding the existing tunnel because that approach is the fastest, cheapest, and easiest way for them to solve their immediate problem. But one of the reasons we have a NEPA process is that corporate decisionmaking on this model frequently yields results that have major externalities and impose long-term costs on other parties and on the public sphere that far exceed the savings incurred by the decisionmaker. As we have been arguing throughout these comments, the expansion of the Virginia Avenue Tunnel seems quite likely to be just this sort of decision.

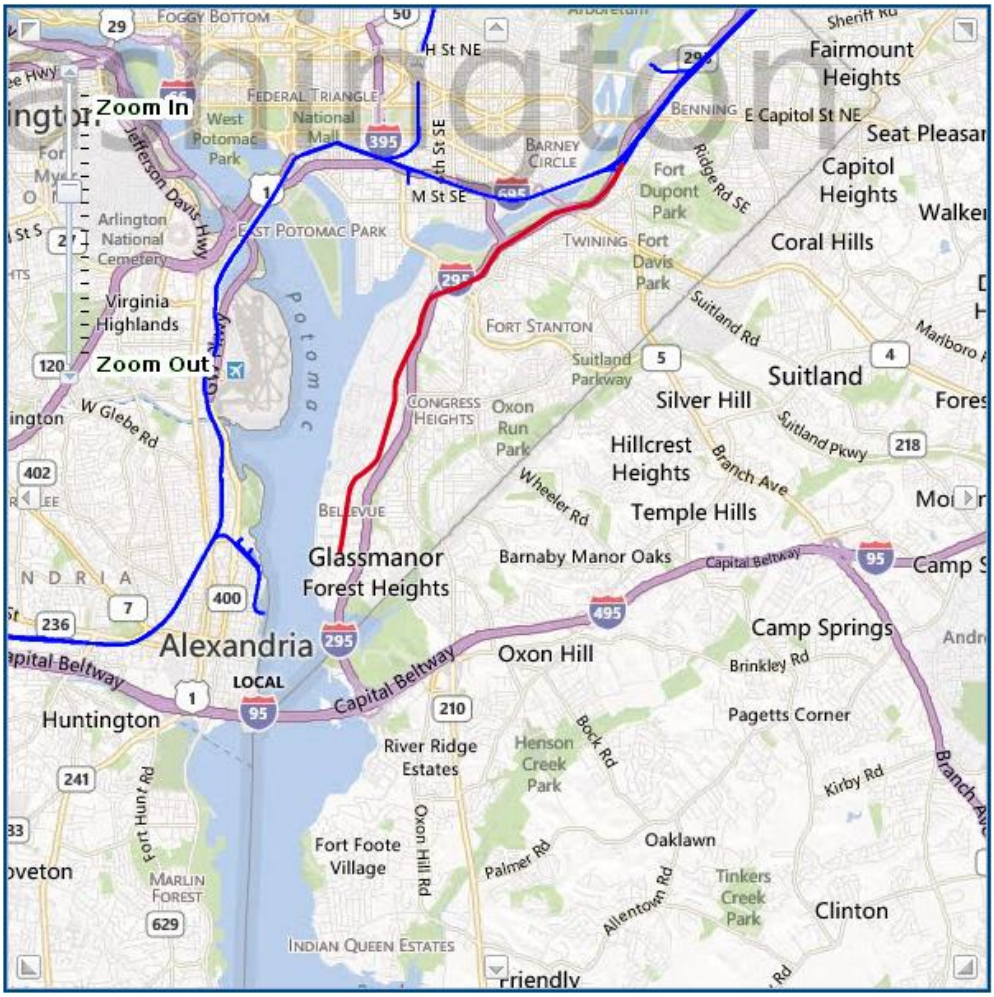
It is therefore imperative that the NEPA process produce a factual, detailed, and comprehensive analysis of the comparative costs and benefits of alternative approaches to solving the problems that compel the replacement of our antiquated rail infrastructure. The Draft EIS released in July falls far short of this mark.

The DEIS Needs to Be Redone to Evaluate Additional Concepts

The DEIS has simply lifted from the 2007 NCPC Railroad Realignment Study the concepts that would provide for rerouting of CSX away from the Virginia Avenue Tunnel, without examining any other rerouting concepts considered in the past, or any variation of those alternative concepts. We suggest that NCPC be asked to update its 2007 analysis and to propose the route(s) that they believe offer the most promising alternatives to expansion of the Virginia Avenue Tunnel. We believe that opportunities for new alignments may have presented themselves since that report. For example, The Potomac River Generating Plant, owned by GenOn, just north of Alexandria has been decommissioned and is currently undergoing demolition and environmental clean up. This location provides a clean slate for constructing the Virginia side of a new Potomac River crossing.

The current track configuration is depicted on the CSX website. [See the map on the following page.] Just north of Alexandria a spur line heads to the Potomac River, to serve Robinson Terminal.

The two short stubs off of that spur line were used to serve the Potomac Generating Plant. On the Anacostia side the rail tracks that served Blue Plains and other customers, the same tracks to which the 1997 NCPC realignment would have connected, have been enhanced for visibility.



To identify alternative routings, CSX's basic requirements should be supplemented with additional criteria, encompassing a broader range of needs, interests, and stakeholders. An alternative route should:

1: Provide a continuous double–tracked railway to accommodate double stacked container trains;

2: Accommodate expansion of passenger and commuter rail services

3: Separate passenger and commuter rail infrastructure from freight infrastructure, allowing each system to be optimized for its specific use

4: Address the safety and security concerns associated with high-volume freight operations near population centers and national landmarks;

5: Locate freight tracks at least 1000 feet away from the Capitol and Monumental Core to provide dilution of the emissions that CSX diesel locomotives would continue to produce;

6: Minimize the amount of new and rebuilt tracks and

7: Utilize existing tracks and rights of way to the extent possible

Consider A New Potomac River Rail Crossing

The separation of freight and passenger/commuter rail infrastructure may require a new Potomac River crossing. This cross could be either a bridge or a tunnel. In the *MidAtlantic Rail Operations Phase I Report* of 2002, CSX proposed an additional Potomac River double track bridge at a cost of $300 million (*Mid-Atlantic Rail Operations Phase II Report,* December 2009 page 2-11) that amounts to a current estimate of $327 million for a new Potomac River rail bridge.[38] A tunnel would also be a viable option. Locating the tunnel below the bed of the Potomac River, which at this point is about 30 feet deep, would require greatly reduced approach slopes, a shorter total length and much less expense than the 80 foot deep, nine mile long tunnel that the DEIS considered as Concept 8.[39]

We now have the equipment to bore a tunnel under the Potomac River, and if necessary, under the Blue Plains right-of-way. In April of this year, WASA unveiled *Lady Bird*, a massive tunnel boring machine that is now being used to drill a huge 4-mile long tunnel from Blue Plains, under the Potomac, and up the Anacostia, to the Main Sewage Pumping Station near Nationals Stadium. Boring machines have been successfully used in railway applications.[40]

For some alignments, such as Blue Plains, tunnel boring under existing rights-of-way may be more practical than attempting to reconstruct surface tracks, given subsequent redevelopment. Another possibility would be to lower the tracks and deck over them, like the SW tracks along a part of Maryland Avenue or perhaps a Virginia Avenue type of shallow tunnel in order to coexist with the development that has occurred in this area. The possibility of using a tunnel boring machine for all or part of this work needs to be evaluated.

[38] The conversion from 2009 dollars to 2013 dollars used the CPI inflation calculator. http://data.bls.gov/cgi-bin/cpicalc.pl?cost1=300&year1=2009&year2=2013

[39] NCPC proposed a rail tunnel under the Potomac River between Virginia and Anacostia in their 1997 plan *Extending the Legacy: Planning America's Capital for the 21st Century*.

[40] In 1993, The Canadian National Ry. Co. (CN) constructed a new bored railroad tunnel between Port Huron, MI, and Sarnia, Ontario, to replace a 100-year old tunnel in order to accommodate trains of double-stack container cars. The cost of the one-mile tunnel was estimated at $155 million or about $250 million in today's dollars.

Conclusion

The above discussion is meant to illustrate, on a conceptual level, that there are alternative alignments, alternative configurations and alternative construction methods that could re-route CSX trains away from the SW tracks and the Long Bridge, and by doing so, save the cost and physical disruption of having to reconstruct the Virginia Avenue tunnel. The Committee of 100 strongly recommends that these and other possible alternate alignments be further developed and included in the DEIS.

Section 4(f) Commentary

The Draft Section 4(f) Evaluation of the DEIS addresses Section 4(f) of the U.S. Transportation Act of 1966 (49 U.S.C. §303). This Act pertains to the use of publicly–owned parks, recreation areas and land of a historic site. That "use" includes temporary or permanent occupancy of any of those designated properties or resources and is permitted only if there is no feasible and prudent avoidance alternative. Reconstruction of the Virginia Avenue Tunnel, by means of any of the three tunnel rebuild alternatives, would require use of 4(f) resources or properties. That use requires the approval of Federal Highway Administration. Before that use can be approved by the FHWA an evaluation of the Section 4(f) properties or resources is required to determine if there are any feasible and prudent avoidance alternatives. The evaluation is required to take into account all possible planning to minimize harm to the section 4(f) properties or resources (23 CFR §774.17). The Evaluation is required to encompass resources or properties that will be directly affected by the reconstruction, what is referred to in the DEIS as the "limits of disturbance". According to the Evaluation, the affected properties are (page 5):

Virginia Avenue Tunnel
The L'Enfant Plan of Washington, DC
Capitol Hill Historic District
Virginia Avenue Park

The Evaluation Fails to Address Permanent Use

The Evaluation addresses the impact on Virginia Avenue only during construction and in terms of the need to temporarily occupy part of Virginia Avenue to accomplish trenching to provide space for construction and to provide different configurations of "run around" tracks for continued CSX operations while the existing tunnel is demolished and then rebuilt.

The Evaluation concedes that the "use" would not be a *de minimis* impact, the trenching would not be minor, and the use would be adverse in terms of Section 106 "due to the temporary occupancy of a contributing element (Virginia Avenue SE) to the L'Enfant Plan" (page 12). But the Evaluation fails to address the permanent use of a part of Virginia Avenue.[41]

While the Section 4(f) Evaluation does not discuss this permanent incursion into public space, page 3-5 of the DEIS concedes this fact, but without quantifying the amount of incursion:

[41] Alternative 2 would shift the center line of the tunnel seven feet south, Alternative 3 would shift the center line 25 feet to the south and Alterative 4 would shift the center line 17 feet to the south (DEIS 3.2.1.1-3.2.1.4). Because these measurements are framed in terms of the "center line" only, it is unclear how far the tunnel footprint is being expanded to accommodate the second track proposed by each alternative. The tunnel footprint appears to shift by up to 50 feet. These would be permanent increases in the footprint of the tunnel. The run-around tracks and construction access space required during construction that would extend even further beyond the 1901 right-of-way.

> Because all three Build Alternatives described in this Draft EIS contemplate that the reconstructed tunnel would only be located within CSX owned **or public property**, rather than intruding into or under any private property, no additional detail beyond those already presented here is warranted [emphasis added].

The right-of-way for the Virginia Avenue tunnel was granted pursuant to 1901 statute. All of the proposed alternatives for rebuilding the tunnel involve widening the tunnel beyond that 1901 right-of-way into the right-of-way of Virginia Avenue.[42]

In addition to the L'Enfant alignment of Virginia Avenue, there are also DC-owned (or administered) rights-of-way for Virginia Avenue for places where the present Virginia Avenue alignment deviates from the L'Enfant alignment. For example, between 4th and 5th/6th Streets SE "the alignment bows to the south, deviating from the original L'Enfant Plan alignment" (Evaluation, page 26). Thus, in addition to the L'Enfant property use, there is also the proposed permanent use of publicly–owned property that is not addressed in the DEIS: the rights-of-way of the changed alignment of Virginia Avenue. Neither the proposed permanent use of the L'Enfant property nor the proposed use of publicly-owned property (the DC administered rights-of-way due to the current Virginia Avenue alignment) is addressed in the Evaluation.

The Evaluation Did Not Consider Feasible and Prudent Alternatives

The project cannot use Section 4(f) properties or resources unless it is determined that there is no feasible and prudent avoidance alternatives and the evaluation takes into account all possible planning to minimize harm to the section 4 (f) properties (23 CFR §774.17).

These are feasible and prudent avoidance alternatives and both the DEIS and Evaluation need to be redone to evaluate these alternatives and to perform realistic and pragmatic planning to minimize harm to the Section 4 (f) properties, and also to evaluate impacts to commuter rail, Amtrak, air quality and safety and security.

As explained in the Revisiting Alternative Routes section above, neither the DEIS nor the Evaluation addresses the tunnel crossing from Alexandria, south of National Airport, to Anacostia, that would connect to the existing CSX track at the Benning Yard as proposed by NCPC in their 1997 report.

Neither the DEIS nor the Evaluation considered the recent decommissioning of the Potomac River generating plant as a potential beginning point for such a a crossing to Anacostia that would connect with the Blue Plains tracks and right-of-way.

[42] See 31 Stat 767 (Feb. 12, 1901). The DEIS does not cite any authority that might interpret this 1901 statute as granting right-of-way to CSX beyond the boundaries of the current tunnel. Nor does the DEIS cite any subsequent statutory or other authority granting CSX additional right of way for the tunnel.

Nor did the DEIS or the Evaluation consider whether a tunnel or a bridge would be most appropriate for such a crossing or whether it would be feasible to recondition the surface tracks that formerly supplied Blue Plain or whether a tunnel or decked-over tracks under that right-of-way would be more appropriate.

The Evaluation Used the Wrong Standard

In evaluating impacts of the alternative routings on each of the four Section 4(f) resources and properties the Evaluation rejects all of the alternative routings that were considered, primarily because they do not meet the Purpose and Needs for the project. The problems associated with the biased Statement of Purpose and Needs have already been discussed. The impacts of alternative routings need to be re-evaluated after a revised Statement is issued. That revision should:

- Develop a Purpose and Need Statement to address the deficiencies explained in these comments;
- Allow for expansion of Amtrak as described in the *Union Station Master Plan*;
- Allow for expansion of commuter rail as described in the *SW Ecodistrict Plan;*
- Quantify the commuter benefits of expanded Amtrak and commuter rail service;
- Provide for continued (and expanded) operation of passenger and commuter rail on the tracks in SW DC that connect to the First Street Tunnel leading to Union Station;
- Eliminate any restrictions that would prevent electrification of those tracks;
- Compute the environmental effects of those changes; and
- Evaluate the safety and security benefits of rerouting CSX away from downtown, the Monumental Core and the U.S. Capitol.

The alternatives that would reroute CSX away from the Virginia Avenue Tunnel, the SW Tracks, the Long Bridge and the Anacostia Lift Bridge all assume that the Virginia Avenue tunnel would have to "remain to service Washington Metropolitan Area regional customers" (Evaluation, page 15). The apparent rationale for this statement is that CSX has freight delivery customers in SW that it will have to continue to serve. In fact, the only existing customer is the Capitol Heating Plant, now fueled by natural gas, with coal as a back-up fuel. But the plant is being converted to a co-generation plant, fueled by natural gas, and the back-up fuel will be oil. By the time that any of the tunnel rebuild Alternatives could be accomplished, there will no longer be CSX freight delivery customers along the SW tracks.

Conclusion

The Committee of 100 recommends that the DEIS be revised to address the deficiencies described in these comments, and that the DC Department of Transportation and the Federal Highway Administration adopt the No-Build Option until such time as the DEIS can be substantially revised to adequately consider serious operational and physical concerns and consider the short and long term benefits of the separation of freight from commuter and passenger rail service. The revised DEIS should:

- Address the deficiencies identified in these comments;
- Facilitate the proposed expansion of Amtrak service at Union Station;
- Facilitate the proposed expansion of commuter rail service;
- Quantify the commuter benefits of these changes;
- Eliminate any restrictions that would prevent electrification of SW DC tracks;
- Compute the environmental effects of electrification; and
- Evaluate the safety and security benefits of rerouting CSX away from dense population areas including the downtown, the Monumental Core and the U. S. Capitol grounds.

Respectfully Submitted,

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