

Report on the Progress in Implementing
Rail Improvements to the Fredericksburg
Rail Yard to Reduce Dwell Times of
Hazardous Material Shipments

December 30, 2011

**TO THE CHAIRMAN OF THE SENATE FINANCE AND
HOUSE APPROPRIATIONS COMMITTEES**



Prepared by:



Virginia Department of Rail and Public Transportation
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COMMONWEALTH of VIRGINIA

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December 30, 2011

The Honorable Robert F. McDonnell
Governor of Virginia
Patrick Henry Building, 3rd Floor
1111 East Broad Street
Richmond, Virginia 23219

Honorable Charles J. Colgan
Chairman, Senate Finance Committee
10660 Aviation Lane
Manassas, Virginia 20110-2701

Honorable Delegate Lacey E. Putney
Chairman, House Appropriations Committee
P.O. Box 127
Bedford, Virginia 24523

Gentlemen:

Attached for your review is a report on progress to implement improvements to CSX Transportation's Fredericksburg Yard in Fredericksburg, Virginia as directed in Chapter 890, Item 448.G.1. - 448 G.4. of the 2011 Acts of Assembly [H1500]. The Bill authorizes Industrial Access Railroad Track funds for improvements which reduce the average dwell times of hazardous material shipments subject to regulation under Title 49 CFR Part 174 et seq. to not longer than 24 hours. This report is provided by the Virginia Department of Rail and Public Transportation to:

- i. Inform the Senate Finance Committees and House Appropriation Committees of progress to date with CSX, the Department, and the affected localities.
- ii. Communicate the concerns of stakeholders in achieving the goals of the project.
- iii. Clarify the next steps which will be taken by the Department and CSX to implement the goals of Items 448.G.1. – 448.G.4. utilizing Industrial Access Railroad Track funds.

Sincerely,

A handwritten signature in cursive script that reads "Thelma Drake".

Thelma Drake

c: Honorable Sean T. Connaughton, Secretary of Transportation

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Introduction and Background

In 2010, the Mayfield Community Association began working with the Fredericksburg City Council, Senator R. Edward Houck and CSX Transportation Inc. (CSXT) to address concerns over the storage of hazardous materials at the Fredericksburg yard, a rail yard owned and operated by CSXT.

For many years, CSXT had staged classified hazardous material cars in its active Fredericksburg freight yard for delivery to rail customers in the Fredericksburg area. The Fredericksburg yard is at the central point of line between Richmond and Washington. Federal law (Title 49 CFR Part 174 et seq.) regulates the storage of CSXT railcars in Fredericksburg yard, since it falls under the purview of interstate commerce. This regulation sets a maximum allowable dwell time of 48 hours that a loaded classified hazardous material car can sit idle in an active railroad yard. Cars can, however, sit on leased trackage or industrial trackage for an extended period of time, outside of the requirements of Title 49 CFR Part 174 et seq.

The community's recent concerns resulted from the introduction of ethanol to the Fredericksburg yard. TRANSFLO, a subsidiary of CSXT, opened an ethanol transloading facility in the Bowman Industrial Park in Spotsylvania County, and used the Fredericksburg yard to stage ethanol cars prior to delivery to the Bowman Center. A provision in Spotsylvania County's special use permit (SUP) for the TRANSFLO terminal limits to ten the number of ethanol cars—full or empty—that can be present in the County at any one time. As a result, ethanol loads were staged in the Fredericksburg yard for a longer period of time than would be optimal for the efficient operations of a transloading facility.

Senator Houck served as a mediator between CSXT and the community regarding the hazardous materials, while maintaining that CSXT was in compliance with Federal regulations. In a letter dated February 21, 2011, CSXT proposed multiple potential options related to the movement and storage of hazardous material in Fredericksburg and Spotsylvania which would address the Mayfield Community Association's concerns. These options ranged from infrastructure improvements to changes in CSXT traffic and staging operations.

The negotiations between CSXT and Senator Houck resulted in legislation in the 2011 Acts of Assembly enabling the Director of the Department of Rail and Public Transportation (DRPT) to enter into Agreement with CSXT for improvements to reduce average dwell times to not longer than 24 hours. The legislation authorized the use of Industrial Railroad Track funds in FY11 and FY12. Improvements could include, but are not limited to, those that (i) increase capacity at existing storage facilities terminating near Fredericksburg; (ii) increase the physical distance between commodity storage areas and residential communities; and (iii) transfer intermediate storage of commodities to locations closer to terminus of the shipment.

Item 448 also included requirements that the Director of DRPT report to the Chairmen of the Senate Finance and House Appropriations Committees by September 1st and December 31st on the progress in achieving a reduction in dwell times of hazardous materials in Fredericksburg Yard. This report fulfills that requirement.

Progress Report

In June of 2011, DRPT discussed improvements proposed by CSXT with the railroad and Senator Houck and, toured Fredericksburg Yard and Bowman Center Industrial Park in Spotsylvania County. After passage of the Appropriations Act, the Department presented the language authorizing use of Industrial Access Railroad Track funds and the proposed improvements to the Commonwealth Transportation Board (CTB), requesting allocation of grant funding for \$450,000 in FY11 and \$450,000 in FY12. Upon approval by the CTB, DRPT began working with CSXT to further develop improvements and initiated negotiations for a grant funding agreement. During these discussions, CSXT and DRPT identified two specific improvements that would create a safer environment for the neighboring community and reduce the dwell time of hazardous materials in the yard. The first improvement was to create greater separation between the rail cars and the neighborhood. US Government's Emergency response Guidebook recommends an initial isolation distance for ethanol at 150 feet, and adding barriers to contain potentially spilled materials improves upon the protection provided by distance alone. By building a new storage track to the west of the existing yard, and installing barriers, the neighboring community would be protected from an incident involving an ethanol car.

The second improvement would be upgrading track and enhancing security within the Bowman Center, in order to stage more ethanol loads closer to the TRANSFLO terminal, and thereby limit the amount of time they are staged in the Fredericksburg yard.

In drafting the agreement, DRPT and CSXT worked toward a phased approach to project development and implementation which was intended to achieve the goals of the legislation both in the short and long term. The first phase of infrastructure improvements would increase the distance between the Mayfield Community and the railcars, while increasing security around the portion of the yard in which they were stored. Phase two would achieve reduction in dwell times, but involved amending the special use permit to allow additional storage of tank cars at Bowman Center in Spotsylvania County.

Independent of these discussions, CSXT changed its operating plan to deliver certain classified hazardous materials directly to a siding in Milford, south of Fredericksburg, and not bring these materials into the Fredericksburg yard. This action by and large removes TIH (Toxic by Inhalation)/PIH (Poison by Inhalation) materials from the Fredericksburg yard.

At a meeting of the Mayfield Community Association in September 2011, CSXT proposed its phased plan for infrastructure improvements. The Mayfield Community

Association endorsed the proposed improvements to expand the Fredericksburg yard and develop additional storage track at Bowman Center in Spotsylvania County.

The Department and CSXT were finalizing the grant funding agreement when the November elections changed the feasibility of the proposed improvements plan. Senator Houck lost his seat in the General Assembly and the Spotsylvania County Board of Supervisors had significant turnover. The project lost critical stakeholders, and the newly elected municipal officials are not familiar with the project's history. As a result, the proposed amendment of the special use permit for additional rail tank car storage at Bowman Center in Spotsylvania County is delayed pending discussion with Spotsylvania County officials. Since the funding agreement between the Department and CSXT was predicated on a two-phase plan, the agreement cannot be executed and Phase One—the yard improvement—cannot be initiated without a level of certainty that Phase Two can be accomplished.

Next Steps

The Mayfield Community has been notified of the recent developments which have placed the project on hold, but remain eager to commence the yard improvement project that will make their neighborhood safer. While CSXT has moved the most hazardous material rail cars out of Fredericksburg yard, the ethanol remains near the community. With restrictive language requiring reduction in dwell times and improvements in both Spotsylvania County and Fredericksburg, if the grant funds are utilized, CSXT and DRPT are limited in their ability to Proceeding with Phase One. In order to advance the project, a legislative solution must be found so that CSXT track capacity improvements, endorsed by the Mayfield Community, can begin west of the Fredericksburg yard, and CSXT can continue to work with Spotsylvania County to apply for an amendment to the Special Use Permit to increase the number of ethanol cars allowed to be parked in the Bowman Industrial Park area.

To that end, CSXT and the Department have begun discussions with the community, state and local officials and legislative staff to determine a legislative remedy that would (a) allow work to begin on the agreed-upon Phase One improvements, (b) provide additional time to discuss Phase Two improvements with local officials, and (c) maintain the intent of the original Act.

Appendix A

Fredericksburg Area Rail Improvements

The Fredericksburg yard consists of the outer two tracks of a double mainline in the center. Local customers (ethanol, LPG, chlorine, lumber, building products etc) are all served from this yard. The mainline speed is 40 mph through Fredericksburg (including commuter trains).

PROPOSED STEP ONE – Fredericksburg Yard Expansion

Expansion of Fredericksburg Yard to increase physical separation of staged cars from neighboring community. New 1600' track would create 26 car spots dedicated to hazardous material loads

- 1.) Greater rail car distance from community – from 105' to 260' to the first house.
- 2.) An existing berm will be improved on the east side of new track for greater protection.
- 3.) Security provisions will be developed due to track design.

CSXT is working with the Department and the City of Fredericksburg to review several proposed track designs. The aerial below represents the concept under discussion.

PROPOSED STEP TWO – Increase the Bowman Center storage

CSX currently stages local traffic on Track One, which will soon be extended to facilitate the extension of VRE to Spotsylvania County. As a result, capacity in the Fredericksburg Yard will be diminished, even after construction of the new yard track. Additional storage in the Bowman Center for ethanol would lower the dwell time in the Fredericksburg Yard for ethanol and improve the loading of outbound trucks, making the operation more efficient. Such expansion would require an amendment to TRANSFLO's Special Use Permit with Spotsylvania County.

The current TRANSFLO operation in Bowman holds 10 rail cars or 280,000 gallon of product with a transfer of product directly to truck. Any switching issues can result in a transfer shut down and cause rail cars to dwell longer in the Fredericksburg yard.

Tank Storage - Add fixed storage by rehabbing one or more of the tanks in the Bowman Center. Each of the larger tanks has product capacity for 10 rail cars of ethanol or 280,000 gallons. One additional tank would be needed for containment in the event of a spill.

Track Storage - Install a crossover on tracks 4 & 5 within the Bowman terminal. This would allow an additional 10 cars to be stored in the Bowman Center beyond the current TRANSFLO operation. TRANSFLO has a track mobile available for switching

No costs have been developed for these projects.

Appendix B

Mayfield Civic Association Endorsement of CSXT Proposal

**Mayfield Civic Association
311 Glover Street
Fredericksburg, Virginia 22401
September 21, 2011**

**Robert W. Shinn
Partner
Capital Results
50 Pear Street
Richmond, Virginia 23223**

Dear Mr. Shinn:

Greetings from the Mayfield Civic Association! Many Thanks are extended to you and your staff for listening to the concerns of ours residents. We truly appreciate all of the time and effort that has been exhibited on our behalf.

Following your presentation September 15, 2011, on the hazardous material tanker cars in the Mayfield rail yard, our members whole heartedly accepted the proposal and look forward to its implementation. Please provide us with a copy of the proposal for our records.

Again, many thanks for all that you have done. We all look forward to hearing from you very soon.

Sincerely,



**The Mayfield Civic Association
Rev. Hashmel C. Turner Jr., President**

Appendix C

Timeline of Events

February 21, 2011

CSXT sent a letter to Senator Houck on potential improvements to address concerns related to the movement and storage of hazardous material rail cars in Fredericksburg and Spotsylvania County. The proposed improvements included:

- Expanding storage capacity at Bowman Center in Spotsylvania County (limited by a Special Use Permit)
- New Track Construction at Fredericksburg Yard to increase distance between storage cars and the community from 110 ft to 260 ft.

February 28, 2011

CSXT sent a letter to the City Manager of Fredericksburg to communicate actions already taken to address concerns:

- Provision of firefighting and response equipment to the Fire Department
- Developing a Transportation Emergency Response Plan
- Increasing security at Fredericksburg Yard to prevent trespassing
- Altering operations to stage more cars in Richmond to reduce volumes in Fredericksburg Yard
- Improving operations to increase throughput and moving rail cars through the yard more expeditiously.

CSXT also addressed the proposed improvements to Bowman Center in Spotsylvania County and Fredericksburg Yard.

March 14, 2011

Legislation in the 2011 Acts of Assembly requires the Director of DRPT to enter into Agreement with CSXT for improvements to reduce average dwell times to not longer than 24 hours, with authorization to use the Industrial Railroad Track funds.

June 2, 2011

The Director of DRPT and Chief of Rail met with Senator Houck and Jason Powell with the Senate Finance Committee to discuss the proposed improvements in CSXT's letter of February 21, 2011. The meeting participants toured Fredericksburg Yard and Bowman Center Industrial park areas. The result of the meeting was a request from Senator Houck that CSXT further develop the proposed improvement plans and bring them forward to the Mayfield Community Association, and the City of Fredericksburg elected officials and administrative staff.

June 15, 2011

DRPT presented the proposed improvements and legislation the Commonwealth Transportation Board, requesting allocation of funding for \$450,000 in FY11 and \$450,000 in FY12. The Resolution passed, enabling DRPT to develop and enter into Agreement with CSXT for FY11 funds and improvements to Fredericksburg Yard.

June 24, 2011

DRPT initiates the project through meetings with CSXT to discuss and develop improvements. The parties begin drafting an Agreement and the Scope of Work to be covered under the FY11 allocation of \$450,000. Negotiations center upon the legislative language which specifies reduction in dwell times to not longer than 24 hours.

CSXT contends this cannot be achieved in the short term, but that improvements to increase the distance between the community and storage cars are part of a strategy to achieve the goals stated in the legislation.

Negotiations stall when the City of Fredericksburg, Spotsylvania County, and Senator Houck reject the proposed Agreement. Correspondence continues between DRPT, CSXT, Fredericksburg, Spotsylvania, and Senator Houck.

August 25, 2011

CSXT, DRPT, Senator Houck's Office, elected and administrative representatives from Fredericksburg, and representatives from the Mayfield Community Association met to discuss a phased implementation approach that included new track construction in Fredericksburg Yard and at Bowman Center in Spotsylvania County.

CSXT TRANSFLO and CSXT pledged to continue to work with the community to address their concerns, including concerns over the storage of hazardous material storage cars at Fredericksburg Yard which are not directly related to the CSXT TRANSFLO site at Bowman Center.

September 15, 2011

The Mayfield Community Association held a meeting at the Mayfield Civic Association Building at 311 Glover Street in Fredericksburg. Reverend Turner presided, with CSXT presenting their update and plans for addressing community concern over the storage of hazardous materials in Fredericksburg Yard.

Rob Shinn with CSXT presented. He reminded residents of the types of materials stored at Fredericksburg Yard: Chlorine (in gas form), Liquid Petroleum Gas (LPG), and Ethanol (an additive to fuel made from corn and coming out of the Midwest).

Residents were informed that CSXT has moved the storage of Chlorine and LPG to Milford, in Caroline County, VA. These are the most dangerous of hazardous materials to the Mayfield Community in the event of an accident. Ethanol storage continues, however, and CSXT proposes to build a spur further away from the Mayfield side of Fredericksburg Yard. This would more than double the current distance from stored Ethanol tanks to the nearest house to 267ft. It was noted that the Federal standard was a minimum of 150ft distance between storage of hazardous materials and residential dwellings.

Residents were also concerned about an emergency response plan, which CSXT deferred to the Fire Department and Police Department representatives at the meeting. A

Transportation Emergency Response Plan already exists, and CSXT is part of that plan. Foam trucks are to be provided and located near the site as well.

Beatrice (Bea) Paolucci, Representative from City Council for the 4th Ward, recommended that Mayfield's Civic Association vote on the CSXT plan to build a spur in Fredericksburg Yard and move Ethanol storage further from Mayfield while pursuing a revised SUP in Spotsylvania County to increase storage capacity at Bowman Center.

September 27, 2011

The Mayfield Civic Association endorsed the CSXT improvements proposed for Fredericksburg Yard at the September 15, 2011 Meeting via letter to Robb Shinn with CSXT. (See Appendix B)

November 1, 2011

Senator Houck, CSXT, and Mayfield Civic Association members met to discuss updates. Senator Houck spoke about the Agreement between the Department of Rail and Public Transportation and CSXT which was in final stages of negotiation. The Agreement would provide \$450,000 in Industrial Access Railroad Track funds for the first phase of the project, which is to increase the distance between storage tanks of Ethanol at Fredericksburg Yard and the Mayfield Community. A berm, and security fence would help further secure the area.

November 8, 2011 – Election Day

With Senator Houck's losing his seat in the General Assembly and significant turnover in the Board of Supervisors in Spotsylvania County, the dynamics of a two phased plan have changed. The Agreement between CSXT and DRPT was built on a first phase to improve and secure Fredericksburg Yard and a second Agreement which would satisfy legislative requirements from the 2011 Acts of Assembly to reduce dwell times of hazardous materials to less than 24 hours.

November 28, 2011

CSXT and DRPT had a conference call to discuss the status of the project and the Agreement. The legislation, as it is currently written, limits the ability of CSXT and DRPT to enter into Agreement. Reducing dwell times, as required by the legislation and reflected in the Agreement, is dependent on amending a Special Use Permit in Spotsylvania County. With a new Board of Supervisors, there is no level of certainty to achieve this in the short term.

Both CSXT and DRPT have discussed seeking language amendments to the appropriations legislation which would enable CSXT and DRPT to reach Agreement and use Industrial Access Railroad Funds to begin improvements to Fredericksburg Yard. CSXT will reach out to the Mayfield Community Association to explain these developments and the intentions to keep this project moving forward.

Appendix D

Commonwealth Transportation Board Resolution:
Allocation of Industrial Access Railroad Track Funds



COMMONWEALTH of VIRGINIA

Commonwealth Transportation Board

Sean T. Connaughton
Chairman

1401 East Broad Street - Policy Division - CTB Section - #1106
Richmond, Virginia 23219

(804) 786-1830
Fax: (804) 225-4700

Agenda Item # 14

RESOLUTION OF THE COMMONWEALTH TRANSPORTATION BOARD

June 15, 2011

MOTION

Made By: Mr. Sterling Seconded By: Mr. Bowie

Action: Motion Carried, Unanimously

Title: Rail Industrial Access – CSX Transportation: Fredericksburg Area Improvements

WHEREAS, Section 33.1-221.1:1 of the *Code of Virginia* declares it to be in the public interest that access railroad tracks and facilities be constructed to certain industrial or commercial sites; and

WHEREAS, by passage of Item 448 of 2011 Va. Acts ch. 890, up to \$450,000 in FY11 and FY12 Industrial Access Railroad Track funds is authorized for assistance in construction infrastructure improvements in the Fredericksburg and Spotsylvania County area for rail improvements associated with reducing dwell times of hazardous material shipments subject to 49 C.F.R. part 174 *et seq.* in Fredericksburg Yard; and

WHEREAS, Item 448 of 2011 Va. Acts ch. 890 requires the Director of the Department of Rail and Public Transportation, with approval of CSX Transportation, to initiate infrastructure improvement projects which reduce the average dwell times of hazardous material shipments subject to regulation under 49 C.F.R. part 174 *et seq.* in Fredericksburg Yard; and

WHEREAS, CSX Transportation and the Department of Rail and Public Transportation have already begun coordination and planning of potential improvements in both Fredericksburg Yard and the Spotsylvania area; and

WHEREAS, Item 448 of 2011 Va. Acts ch. 890 specifies that in allocation of funds for this project by the Commonwealth Transportation Board, the requirements of Section 33.1-221.1:1, *Code of Virginia*, with the exception of Section 33.1-22.1:1(F), are waived; and

WHEREAS, the Board believes that this project is for the common good of a region of the Commonwealth and serves a public purpose.

Resolution of the Board
Rail Industrial Access
City of Fredericksburg/Spotsylvania County
June 15, 2011
Page Two

NOW THEREFORE, BE IT RESOLVED, that the Board hereby approves \$900,000 of the Economic Development, Airport, and Rail Access Fund, with \$450,000 allocated in FY11 and \$450,000 allocated in FY12, be provided to construct infrastructure improvements which reduce the average dwell times of hazardous material shipments subject to regulation under 49 C.F.R. part 174 *et seq.* within rail yards, depots, sidings, and other intermediate terminals or facilities and properties located in the City of Fredericksburg to not longer than 24 hours, provided and contingent upon:

1. All necessary right of way and utility adjustments being provided at no cost to the Commonwealth.
2. All costs above \$900,000, which is allocated herein as an industrial rail access grant, being borne by CSX Transportation or sources other than those administered by the Virginia Department of Rail and Public Transportation.
3. Execution of an agreement acceptable to the Virginia Department of Rail and Public Transportation.

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Appendix E

Item 448 G. of the 2011 Virginia Acts chapter 890

Item 448 - Department of Rail and Public Transportation (505)

Authority: Title 33.1, Code of Virginia.

G.1. Prior to July 1, 2011, the director, Department of Rail and Public Transportation, with the approval of CSX Transportation, shall initiate infrastructure improvement projects which reduce the average dwell times of hazardous material shipments subject to regulation under Title 49 CFR Part 174 et seq. within rail yards, depots, sidings, and other intermediate terminals or facilities and properties located in the City of Fredericksburg to not longer than 24 hours. These improvements may include, but are not limited to, those that (i) increase capacity at existing storage facilities terminating near Fredericksburg; (ii) increase the physical distance between commodity storage areas and residential communities; and (iii) transfer intermediate storage of commodities to locations closer to terminus of the shipment.

2. Out of the funds available for Rail Industrial Access pursuant to § 33.1-22.1:1, Code of Virginia, up to \$450,000 in the first year and up to \$450,000 in the second year is hereby authorized for associated infrastructure improvements in the City of Fredericksburg and Spotsylvania County. Such funds may be awarded to CSX Transportation or other entities or political subdivisions identified by the Department as having responsibility for implementing the associated infrastructure improvement. In the allocation of funds for this project by the Commonwealth Transportation Board, the requirements of § 33.1-22.1:1, Code of Virginia, with the exception of § 33.1-22.1:1 F., are waived.

3. Not later than September 1, 2011, and December 31, 2011, the director, Department of Rail and Public Transportation, shall report to the Chairmen of the Senate Finance and House Appropriations Committees on the progress in implementing these improvements. The report shall include specific dates by which infrastructure improvements or other means of reducing average dwell times of hazardous material shipments are anticipated to be implemented or placed in service. In addition, this report shall also assess the adequacy of training provided by CSX Transportation to local first responders and regional hazmat response teams and establish a plan for enhanced training on addressing railroad and hazmat incidents including the development of a comprehensive emergency response plan.

4. In implementing this report, the Director, Department of Rail and Public Transportation, shall solicit the input and involvement of the affected jurisdictions. All agencies of the Commonwealth, upon request, shall provide necessary technical expertise.