



January 23, 2024

Mr. Garrett H. Stephenson, Esq.  
Schwabe Williamson & Wyatt, P.C.  
1211 SW Fifth Ave., Suite 1900  
Portland, OR 97204

Re: Rail Mitigation Plan for the Proposed NEXT Renewable Fuels, Inc. (NEXT) Branchline in Columbia County, Oregon

Dear Mr. Stephenson:

At your request, and on behalf of NEXT, I have evaluated railroad operations planned for the renewable diesel facility in Port Westward, OR that will be served by the proposed branchline off the Portland & Western Railroad (P&W) main track just north of the Kallunki Road crossing (DOT 927277K). In conducting my evaluation, I have been asked to recommend steps that can be taken to mitigate (minimize) delays to vehicle traffic at the Kallunki Road crossing during the arrival and departure of P&W trains serving the facility, as well as farm vehicles traveling over the crossing between the fields and Seely Mint Distillery during mint harvest times that we understand usually occur in July and September. Accordingly, I have developed the findings and recommendations contained in Section 3 of this report, which I may supplement upon receipt of additional information.

#### 1.0 – Background and Experience

I am an owner of the railroad consulting practice of Crosstown Consulting Associates, LLC, which is an Oregon company (Registry No. 150014497). I have a Bachelor of Science degree from California State University at Sacramento, CA in Business Administration, and more than 45 years of experience in the railroad industry. Over the years I have held a variety of positions including conductor, locomotive engineer, assistant trainmaster, certified designated supervisor of locomotive engineers, director of training rules and safety, director of security, assistant chief mechanical officer, chief mechanical officer, superintendent, and assistant vice president of operations planning and analysis. I am also a currently certified train service locomotive engineer in accordance with 49 C.F.R. § Part 240.

During my career I have planned, performed and supervised industrial switching operations at various facilities including grain elevators/terminals, petroleum refineries/terminals, coal plants, forest products facilities, chemical plants, rock quarries, and a steel mill, among others. As a railroad officer I have trained, supervised and qualified hundreds of railroad craft employees, supervisors, and managers. I have also developed, implemented, and managed numerous customer service plans, as well as railroad safety and rules programs, including locomotive engineer certification programs (49 C.F.R. § Part 240). In addition to currently providing railroad forensic consulting services to a variety of clients throughout the country, I have also provided operational and safety assessments that involved both existing and planned industrial switching operations. I have been qualified as an expert witness in the areas of railroad safety, training,

rules, operating practices, and mechanical matters in numerous federal and state courts including Oregon. I am also a member of several professional organizations including the Air Brake Association, The International Association of Railway Operating Officers, and the American Association of Railroad Superintendents. In addition, I am a past member of the Chicago Rail Carriers Association and have participated in several national projects including the Federal Railroad Administration (FRA) Power Brake Railroad Safety Advisory Committee (RSAC), and FRA Dynamic Brake Task Force. I am also familiar with the requirements of federal regulations governing railroad operations as contained in 49 C.F.R. § Parts 200-299.

A copy of my CV is attached.

### 2.0 - Materials Reviewed

In addition to conversations and meetings with associates from the Schwabe law firm, President Cotton at NEXT, representatives of the Mackenzie Engineering firm, and representatives from the Portland and Western Railroad, I visited Port Westward, OR earlier this month to observe the existing Portland & Western Railroad track serving existing customers in the Port as well as the area of the proposed branchline that will serve the NEXT facility. While doing so I inspected the subject Kallunki Road grade crossing and drove the roads used by motor vehicles and farm vehicles in the area including Kallunki Road, Quincy-Mager Road, and Hermo Road. I also attended and was present to hear all testimony that was provided at the January 10, 2024 public hearing conducted by the Columbia Board of Commissioners in St. Helens, OR. In addition, I have reviewed the following materials in developing my findings and recommendations for the NEXT rail mitigation plan:

1. Informational Website on Oregon Mint Farming hosted by Oregon Agriculture in the Classroom Foundation (<https://oregonaitc.org>)
2. Four (4) Mint Harvest YouTube Videos including two (2) featuring Seely Mint, one (1) featuring an ADM sponsored grower, and one (1) Oregon mint harvest video sponsored by the Oregon Farm Bureau as follows:  
<https://www.youtube.com/watch?v=Celr4m8xcjl>  
<https://www.youtube.com/watch?v=zy39SGGVf3U>  
<https://www.youtube.com/watch?v=x9aWUvnL1AU>  
[https://www.youtube.com/watch?v=H4\\_cyEU9AKQ](https://www.youtube.com/watch?v=H4_cyEU9AKQ)
3. Seely Mint Website ([www.seelymint.com](http://www.seelymint.com))
4. General Code of Operating Rules, Eighth Edition (Railroad), Effective 4/1/20 (GCOR)
5. Final Order No. 13-2022 In the Matter of the Application by NEXT, LLC for a Conditional Use Permit for a Rail Branchline in the Primary Agriculture (PA-80) Zone Near Port Westward (CU-21-04) Before the Board of County Commissioners for Columbia County, OR
6. Maul Foster Alongi Rail Diagrams for NEXT Branchline with Track Layout Inside NEXT Facility
7. 3/18/21 Greene Economics, LLC Report of Economic Impacts of Renewable Fuels Facility in Columbia County, OR
8. 1/17/22 Letter from G. Stephenson to Columbia County Board of Commissioners RE: Applicant's Response to Public Comments; Columbia County Board of Commissioners, App DR 21-03; V 21-05 and CU 21-04 (Next Renewable Fuels Oregon, LLC)
9. 2/2/22 NEXT Renewables Fuels Testimony for Second Open Record Period (App DR 21-03; V 21-05 and CU 21-04) Exhibit C

10. 12/9/22 Maul Foster Alongi Plans for Revised Rail Corridor Prepared for NEXT Renewable Fuels, Inc. (CO.0, C1.0, C2.0, C2.1, C2.2, C2.3, C2.4, C2.5, C2.6, C2.7, C2.8, C2.9, C3.0, C3.1, C3.2, C3.3, C3.4, C3.5, C3.6, C3.7, C3.8,)
11. 3/23/22 Board of County Commissioners for Columbia County Oregon Final Order No. 13-2022 Branchline in the Primary Agriculture (PA-80) Zone Near Port Westward (CU 21-04), With Exhibits A-D
12. 5/1/23 NEXT Renewable Fuels, Oregon Rail Loading/Unloading Design Basis
13. 6/16/23 Conditional Use Permit for NEXT Railroad Branchline prepared by Mackenzie Engineering
14. 6/16/23 NEXT Railroad Branchline Submittal Issue Notes (2200315.00 NEXT Renewables)
15. 6/16/23 Mackenzie Engineering CUP2 Exhibits 01-21
16. 12/6/23 Letter from G. Stephenson to Messrs. Mike and Warren Seely
17. 1/3/24 Columbia County Board of Commissioners Staff Report Re. Modification of an Approved Site Design Review in the RIPD Zone-Type II Conditional Use Review
18. 1/9/24 Columbia Riverkeeper 1000 Friends of Oregon Written Comments to Columbia County Board of Commissioners
19. Undated Written Comments of Beaver Drainage Improvement Company, Inc to Columbia County Commission Re: "NXT's application..."
20. 1/5/24 Email Comments and Map from James Hoffman to Columbia County Board of Commissioners
21. 1/10/24 Written Comments of Mike Seely to the Columbia County Planning Commission

3.0 - Findings and Recommendations Developed

1. All trains entering and departing the branchline serving the NEXT facility will traverse the Kallunki Road crossing (No. DOT 927277K), and the trains will be operated by P&W train crews using conventional freight locomotives. It should be noted that an "Emergency Notification System" (ENS) currently exists nationwide that features the posting of a blue sign at highway-rail grade crossings, including Kallunki Road, with a 24/7/365 telephone number to call and report emergencies to the railroad train dispatcher responsible for the territory. The switch providing access to the NEXT facility off the P&W main track will be located approximately 700 feet northwest of the crossing, and the branchline will then extend westward to its end near Hermo Road. Photos of the crossing taken during my recent site visit are shown below as Figures 1a-1c with labels added.

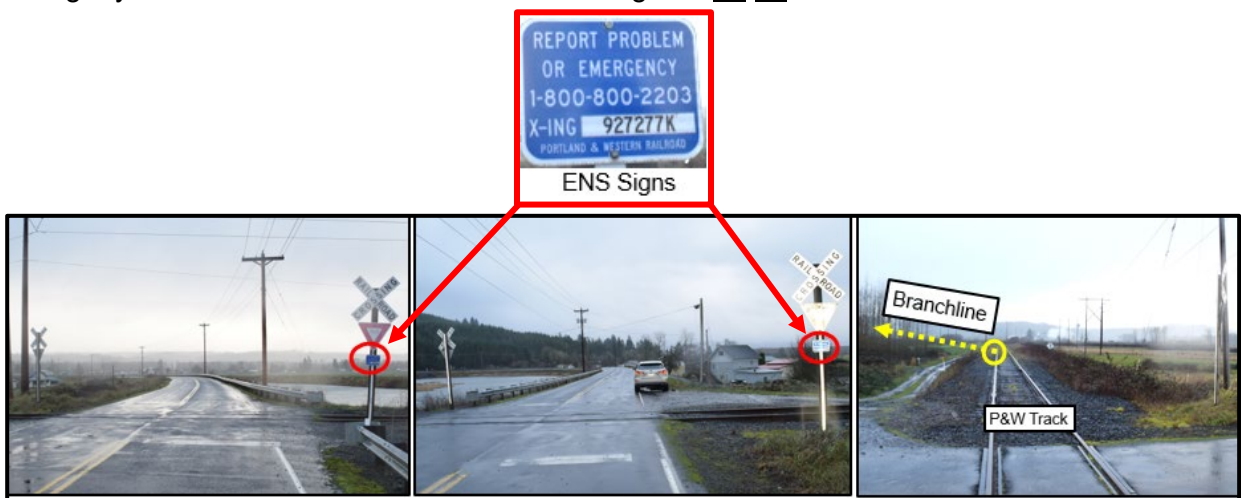


Figure 1a: View north of crossing    Figure 1b: View south of crossing    Figure 1c: View NW from crossing

2. There are three double-ended auxiliary tracks, including an extended length run-around track and two spur tracks planned for installation north of the branchline within the NEXT facility to accommodate the loading and unloading processes as well as the in-plant switching and short-term storage of railcars associated with plant operations. In accordance with industry standards and federal regulations, the maximum speed on these tracks will be 10 mph (FRA Class 1 track per 49 C.F.R. § Part 229.3).
3. Once inbound trains are delivered by the P&W Railroad, NEXT employees or contractors will perform the necessary switching and car placement within the facility using a rail car mover such as a Trackmobile™ that is a specialized utility vehicle equipped with a coupler and train airbrake system designed to move railcars. It should be noted that none of the railcar movements conducted by NEXT crews or its contractor will be allowed to occupy the P&W main track or the Kallunki Road crossing at any time. Figure 2 below is a Google Earth satellite image with labels added showing the area of the planned NEXT facility with the approximate location of the branchline and adjacent auxiliary tracks indicated.

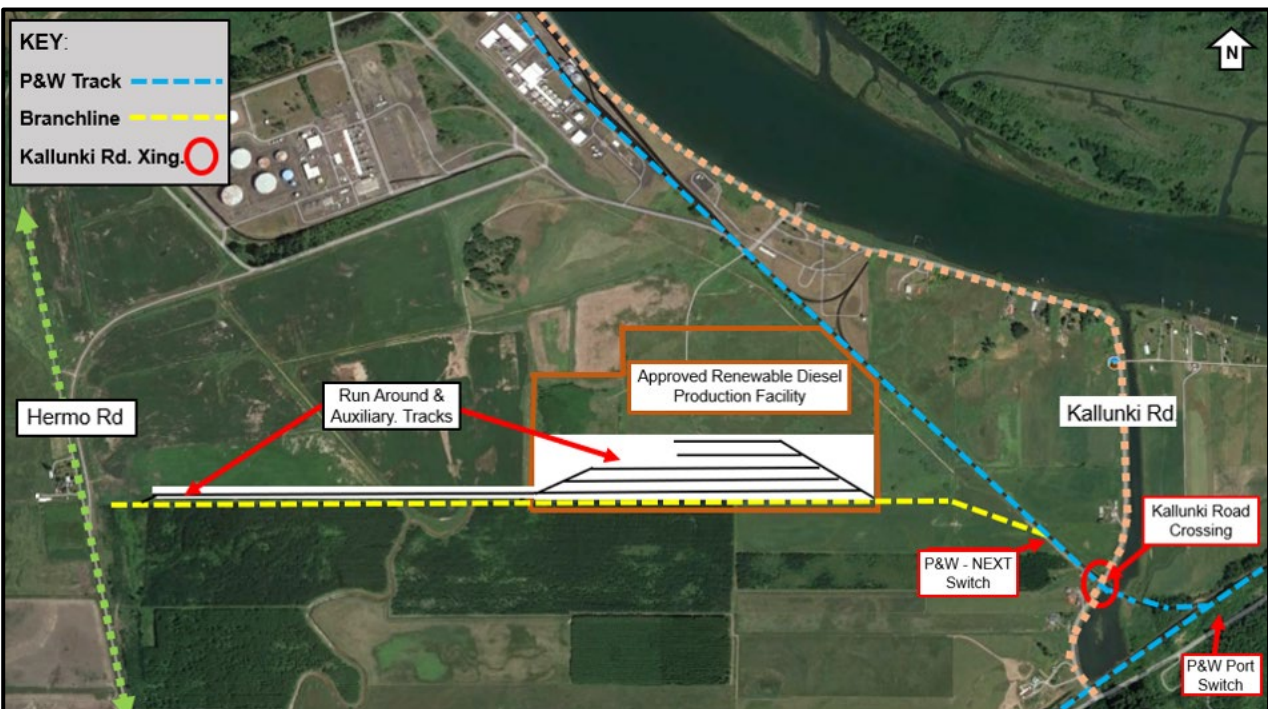


Figure 2: Area of NEXT Facility and branchline with labels added (Track placements are approximate.)

4. With current facility approval for a maximum of 318 cars per week, the 5/1/23 NEXT Rail Loading and Unloading Design Basis Document projects a slightly lower weekly and monthly railcar throughput for the facility of 311 cars in and out per week at full rail capacity, and 1245 cars per month based on the following:
  - Three (3) new 80 car dedicated feedstock trains per week (80 loads)
  - Two (2) 30 car diesel product transfers per week to be handled by currently existing manifest trains that serve other P&W customers in the area.
  - One (1) 20 car bleaching earth product transfers per week also to be handled by currently existing manifest trains that serve other P&W customers in the area.



5. The longest P&W trains entering and leaving the NEXT facility will have approximately 100 cars with a maximum length of 7000', which means continuous movement of these trains over the Kallunki Road crossing and the two private farm crossings on the branchline will require less than 10 minutes to clear on the 10 mph track as follows: (10 mph = 14.67 feet per second (fps) and  $7000' / 14.67 \text{ fps} = 477 \text{ seconds} = 7.95 \text{ minutes}$ ).
6. Since most if not all of the transfer movements over the subject crossing handled by existing manifest trains will involve groups of 20-30 cars with an overall length of less than 2000' including locomotives, these movements in and out of the facility will result in crossing occupancies of less than 3 minutes each as follows: ( $2000' / 14.67 \text{ fps} = 136.3 \text{ seconds} = 2.27 \text{ minutes}$ , which is similar to the cycle time of some motor vehicle traffic signals).
7. To reduce crossing occupancy times during the mint harvest, the 100 car trains can be split in half to accomplish delivery in 2 installments of 50 cars each, with a resulting crossing occupancy of just under 4 minutes for each movement as follows:  $3500' / 14.67 \text{ fps} = 238.5 \text{ seconds} = 3.97 \text{ minutes}$ ).
8. Every P&W crew handling inbound and outbound train movements is required by railroad rules and federal regulations to have a train manifest (consist) that contains a list of all cars in the train and their order of placement that includes car type, load/empty status, and specific information and instructions concerning any cars concerning hazardous materials that can be provided to law enforcement, fire departments and other responders in case of emergency.
9. In accordance with federal regulations and railroad rules, all inbound trains serving the Next facility must receive and pass an inspection prior to departure from their initial terminal, and all outbound trains must also be inspected to ensure all cars and locomotives are in proper condition for service prior to departure from the facility.
10. In addition to the overall goal of minimizing delays to all traffic at the Kallunki Road crossing due to train movements serving the NEXT facility, consideration is being given to the effect such delays would have on the Seely mint farming operation and their farm vehicles in the area. Accordingly, to better understand their farming practices especially during harvest season, attorney Garrett Stephenson reached out to the Seely's on behalf of NEXT in a 12/6/23 letter requesting information about harvest procedures and concerns so they could be considered and addressed in the rail mitigation plan. Since the Seelys did not respond to the letter, I reviewed the publicly available information referenced in Section 2 of this report to gain a general understanding of the mint harvest, which I understand requires dry weather, careful attention to moisture levels, and timely crop processing in order to be successful. Based on the reference material and videos, there appears to be a first harvest cycle in July, followed by a second one later in the season around September, with the actual timing subject to variables, perhaps the most notable of which is the weather. Based on the foregoing, I recommend the following measures be employed as appropriate to ensure inbound and outbound train movements serving the NEXT facility will be conducted expeditiously to minimize traffic delays at the Kallunki Road crossing.
  - Provide P&W crews and NEXT employees conducting rail operations with a standard operating procedure (SOP) for the proper handling of inbound and outbound trains with an emphasis on safety and the importance of keeping crossing occupancy times to a minimum.
  - Establish and maintain consistent communications between P&W and NEXT that include timely (24 hour) advance notice concerning inbound and outbound train movements, with estimated times of arrival and departure at the facility and train consist details via email or fax (i.e. number and types of cars, commodities and load/empty status).

- In advance of a train's arrival, NEXT should ensure all necessary tracks are clear to receive inbound traffic and all associated track switches within the facility are properly lined to allow continuous inbound movement during the delivery.
  - To expedite outbound train departures, NEXT employees should ensure outbound cars are assembled and ready for pickup with loading and unloading mechanisms disconnected and all NEXT employees safely in the clear with the P&W crew ensuring all affected switches and derails are properly aligned to facilitate a continuous outbound departure from the facility without stopping on the crossings.
  - Provide NEXT employees involved in the rail operations with a portable radio to allow communication with P&W crews servicing the facility.
  - Provide a utility vehicle or crew taxi to expedite the P&W conductor's ground duties when delivering and securing inbound trains and while preparing, inspecting, and testing outbound train prior to departure.
  - Identify a contact person(s) and/or position(s) at the P&W and NEXT for area law enforcement, emergency responders and area farmers and or other interested parties to reach with concerns, complaints or requests involving rail operations and include such information for community access through a posting on a NEXT website for the Port Westward facility.
  - P&W could post a crew member at the Kallunki Rd. crossing while servicing the NEXT facility to flag motor vehicle traffic, and communicate with the engineer should it become necessary to separate the train to clear the crossing in the event of an unforeseen delay (typically for blockages in excess of 10 minutes or in case of emergency).
  - During critical times while the mint harvest is underway, the P&W can issue a "Form B Track Bulletin" as provided for in the General Code of Operating Rules at the farmer's request, that would place a railroad foreman in charge at the Kallunki Road crossing during the dates and times of said bulletin to stop and hold trains approaching the crossing from either direction as necessary to allow harvest vehicles traveling between the field and nearby distillery to do so without delay (See GCOR Rule 15.2).
11. With the foregoing in mind, the following points are offered in response to concerns raised in Mr. Mike Seely's 1/10/24 written comments to the Columbia County Planning Commission in opposition to the NEXT branchline.
- In the 2<sup>nd</sup> paragraph of his comments, Mr. Seely states in part: *"Due to trains slowing as they approach the rail yard or gaining speed as they leave, the train will block the road for lengthy periods of time."* In response, as outlined in paragraphs 4, 5, 6, 7, and 9 of this report, the rail operations plan will be structured for inbound train deliveries, and outbound departures serving NEXT to be made in continuous movements designed to minimize or eliminate slowing or stopping on the Kallunki Road crossing during the process.
  - Mr. Seely's expressed need to avoid delays to harvest vehicles due to train traffic during the mint harvest as expressed in the 6<sup>th</sup> and 8<sup>th</sup> paragraphs of his written comments can be easily addressed by splitting large train movements in half as described in paragraph no. 7 above or in the event that harvest conditions make any train delays to farm vehicles untenable, the issuance of a Form B track bulletin by the railroad during such critical times would provide a means to eliminate any and all delay to such vehicles as described in the last bullet point of paragraph no. 9 above.

These findings and recommendations are to a reasonable degree of certainty based on my background, training, and experience, as well as my site visit and review of the materials provided thus far. I reserve the right to amend or supplement this report if additional information is provided.

Submitted by,

A handwritten signature in black ink, reading "Brian P. Heikkila". The signature is written in a cursive style with a large initial "B".

Brian P. Heikkila

Attachment



## Curriculum Vitae of Brian P. Heikkila

### EXPERIENCE

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**May 2017 – Present**      **Crosstown Consulting Associates, LLC**      **Medford, OR**

*Railroad Consultant*

Provide clients with timely and accurate analysis of railroad operational issues. Provide training in railroad safety, rules, and operating practices including engineer training. Conduct operational and safety audits. Provide locomotive event recorder and locomotive video analysis. Provide services as a consulting and/or testifying expert in railroad mechanical, operating, and engineering disciplines. Provide technical consulting support from accident/incident response through case analysis and report preparation including consulting and/or testifying expert witness services if requested.

**July 2015 – May 2017**      **Dennin, Heikkila, & Associates, LLC**      **Peachtree City, GA**

*Senior Vice President*

Provide clients with timely and accurate analysis of railroad operational issues. Provide training in railroad safety, rules, and operating practices including engineer training. Conduct operational and safety audits. Provide locomotive event recorder and locomotive video analysis. Provide services as a consulting and/or testifying expert in railroad mechanical, operating, and engineering disciplines. Provide technical consulting support from accident/incident response through case analysis and report preparation including consulting and/or testifying expert witness services if requested.

**April 2002 – July 2015**      **Full Service Railroad Consulting, Inc.**      **Peachtree City, GA**

*Partner*

Provide clients with timely and accurate analysis of railroad operational issues. Provide training in railroad safety, rules, and operating practices including engineer training. Conduct operational and safety audits. Provide locomotive event recorder and locomotive video analysis. Provide services as a consulting and/or testifying expert in railroad mechanical, operating, and engineering disciplines. Provide technical consulting support from accident/incident response through case analysis and report preparation including consulting and/or testifying expert witness services if requested.

**June 2000 – March 2002**      **Rail Sciences Inc.**      **Atlanta, GA**

*Assistant Vice President of Operations, Planning, and Analysis*

Responsible for the use and application of advanced analytical techniques for the solution of railway operational problems. Performed accident and derailment investigations,



railroad operational and safety studies, mechanical inspections, physical testing, and railroad training. Performed field investigations of crossing collisions and derailments. Analyzed locomotive event recorder data and train stopping distance. Provided consulting and testifying expert witness services in numerous railroad lawsuits involving trespasser incidents, grade crossing collisions, and employee injuries.

**Dec. 1997 – I&M Rail Link, LLC Davenport, IA**  
**June 2000** *Superintendent of Operations*

Responsible for the supervision and management of the operations department of the railroad including classification yard and over the road train operations. Initial territory included the Southern Division between Chicago, IL and Kansas City, MO. Territory was expanded to include the entire railroad after January of 2000 including 1100 miles of main line and approximately 350 employees. Certified Train Service Locomotive Engineer and Designated Supervisor of Locomotive Engineers (DSLE) in accordance with 49 CFR Part 240.

**1989 - 1997 Montana Rail Link, Inc. Missoula, MT**  
*Chief Mechanical Officer* *January 1997 - December 1997*  
*Assistant Chief Mechanical Officer* *November 1994 - January 1997*

Responsible for the supervision and management of the mechanical department which included 200 employees, 3 rail car and locomotive repair shops, approximately 125 locomotives and 1800 rail cars. Also responsible for the inspection, testing, and repair of rail cars handled in interchange across the railroad.

*Director, Training, Rules & Safety Department* *January 1990 – November 1994*  
*and Director of Security*

Responsible for the training and safety of all operating crafts system wide at MRL, as well as the security needs of the railroad. Developed implemented and managed the locomotive engineer certification program, operations testing program, rules training and testing programs. Developed, implemented, and managed the drug and alcohol testing program for the railroad. Certified Train Service Locomotive Engineer and Designated Supervisor of Locomotive Engineers (DSLE) in accordance with 49 CFR Part 240. Developed and implemented airbrake and train handling rules. Developed cold weather training program for extreme operating conditions in mountain grade territories. Served as corporate manager of the FRA Safety Assurance and Compliance Program (SACP).

*Director of Locomotive Engineer Training* *October 1989 – January 1990*  
Directed and managed the locomotive engineer training program for the MRL system.

**1969 – 1989 Burlington Northern Railroad Various Locations**  
*Asst. Manager Locomotive Engineer Training, Overland Park, KS* *January 1988 – October 1989*

Trained and qualified locomotive engineers for the Burlington Northern Railroad system wide. Developed, implemented, and managed locomotive engineer training programs including General Code of Operating Rules, General Safety Rules, Airbrake and Train Handling Rules, and applicable federal regulations. Trained and tested employees using locomotive simulators, including the IITRI TS2 and TS3 models.

## CROSSTOWN CONSULTING ASSOCIATES, LLC

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*Assistant Trainmaster, Spokane, WA*

*February 1987– January 1988*

Responsible for the field supervision of train and yard crews of the Spokane Division. Provided instruction on the General Code of Operating Rules, General Safety Rules, Airbrake and Train Handling Rules, and applicable federal regulations to operating employees. Performed locomotive event recorder analysis. Conducted operations tests throughout the Division. Investigated crossing collisions, derailments, and other railroad incidents including rules infractions and employee injuries.

*Railroad Operations*

*May 1969 – February 1987*

- Locomotive Engineer, Whitefish, MT 3/85-2/87  
Operated freight and passenger trains over the main line mountain grade corridor between Whitefish, MT and Havre, MT and between Whitefish, MT and Spokane, WA.
- Locomotive Engineer, Missoula, MT 11/84 -3/85  
Operated freight and passenger trains over the main line mountain grade corridor and branch lines between Missoula, MT and Helena, MT, Missoula, MT and Butte, MT, and between Missoula, MT and Spokane, WA.
- Special Representative for the International President of the Brotherhood of Locomotive Engineers (BLE) , Western USA 8/84-11/84  
Represented the International President of the BLE on all railroad properties west of the Mississippi River. Attended Division meetings and performed liaison and membership recruitment duties on behalf of the International Office.
- Locomotive Engineer, Whitefish, MT 6/82-8/84
- Locomotive Engineer, Missoula, MT 2/78-6/82
- Switchman, Brakeman, Conductor, Missoula, MT 7/76-2/78
- Railroad leave of absence granted for enlistment in USMC 1/70-1/72  
(Honorable discharge Corporal, E-4).
- Switchman, Brakeman, Missoula, MT 5/69-7/76

## EDUCATION

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- 1979-1980 B.S Business Administration, California State University, Sacramento, CA (Note CA college work done while on GI Bill Leave of Absence from BN)
- 1978 Graduated from the Burlington Northern Railroad Locomotive Engineer Training Program and promoted to Locomotive Engineer
- 1976-1977 Attended University of Montana, Missoula, MT
- 1975 Graduated, Sacramento City College, AA Degree

## SUPPLEMENTARY TRAINING

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- July 2021, Montana Rail Link, Inc., Missoula, MT: Locomotive Engineer Recertification training and testing on the General Code of Operating Rules (GCOR), Air Brake and Train Handling Rules, Safety Rules, U.S. Rail Security Awareness Guidelines, U.S. Hazardous Materials Instructions for Rail, Remote Control Locomotive Operations (RCO), Distributed Power Operations (DPU), Physical Characteristics of the Railroad, and pertinent Federal Regulations in 49 CFR Parts 200-299. Conductor Recertification Training in accordance with 49 CFR Part 242. Federally certified as a Train Service Locomotive Engineer and Instructor Engineer in accordance with 49 CFR Part 240.
- April 2018, Montana Rail Link, Inc., Missoula, MT: Locomotive Engineer Recertification training and testing on the General Code of Operating Rules (GCOR), Air Brake and Train Handling Rules, Safety Rules, U.S. Rail Security Awareness Guidelines, U.S. Hazardous Materials Instructions for Rail, Remote Control Locomotive Operations (RCO), Distributed Power Operations (DPU), Physical Characteristics of the Railroad, and pertinent Federal Regulations in 49 CFR Parts 200-299. Conductor Recertification Training in accordance with 49 CFR Part 242. Federally certified as a Train Service Locomotive Engineer and Instructor Engineer in accordance with 49 CFR Part 240.
- May 2015, Montana Rail Link, Inc., Missoula, MT: Locomotive Engineer Recertification training and testing on the General Code of Operating Rules (GCOR), Air Brake and Train Handling Rules, Safety Rules, U.S. Rail Security Awareness Guidelines, U.S. Hazardous Materials Instructions for Rail, Remote Control Locomotive Operations (RCO), Distributed Power Operations (DPU), Physical Characteristics of the Railroad, and pertinent Federal Regulations in 49 CFR Parts 200-299. Conductor Recertification Training in accordance with 49 CFR Part 242. Federally certified as a Train Service Locomotive Engineer and Instructor Engineer in accordance with 49 CFR Part 240.
- November 2012, Montana Rail Link, Inc., Missoula, MT: Locomotive Engineer Recertification Training on the General Code of Operating Rules (GCOR), Air Brake and Train Handling Rules, Safety Rules, U.S. Hazardous Materials Instructions for Rail, Remote Control Locomotive Operations (RCO), Distributed Power Operations (DPU), Physical Characteristics of the Railroad, and Pertinent Federal Regulations in 49 CFR 200-299
- October 2011, Canadian National Railway (US), Flat Rock, MI: Training class on the Operating Rules, Safety Rules, Air Brake and Train Handling Rules, and Hazardous Materials Regulations
- July 2002, Quantum Engineering, Inc., Orange Park, FL: Training class on event recorder data analysis and operation of QDP Software.

## PROFESSIONAL ACTIVITIES

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- 1997-2000 Member, Safety Committee, American Shortline and Regional Railroad Association
- 1997-2000 Alternate Member, Federal Railroad Administration (FRA) Railroad Safety Advisory Committee (RSAC)
- 1997-2000 Member, Chicago Rail Carriers Association
- 1996 Member, Superintendents' Association of Kansas City

## CROSSTOWN CONSULTING ASSOCIATES, LLC

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- 1996 Member, FRA-RSAC Power Brake Working Committee
- 1997 Member, FRA-RSAC Dynamic Brake Task Force
- 1993-1997 Member, Locomotive Maintenance Officers Association (LMOA)
- 1991-Present Member, American Association of Railroad Superintendents
- 1988-Present Member, Air Brake Association
- 1988-1997 Member, Montana Operation Lifesaver, Board member in 1990
- 1987-Present, International Association of Railway Operating Officers, Past Vice President
- 1982-1987 Brotherhood of Locomotive Engineers, Division 499, Whitefish, MT
- 1978-1982 Brotherhood of Locomotive Engineers, Division 262, Missoula, MT
- 1969-1978 United Transportation Union #978 T/C, Missoula, MT

## MILITARY SERVICE

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- 1970 – 1976 U.S. Marine Corps – Honorable Discharge, Corporal E-4 (2 years of active duty while on leave of absence from railroad)