

# Freight Railroad Infrastructure Improvement Program 2020

***Wisconsin Planning Grant to Identify and Evaluate Clearance and Bridge Barriers to Intermodal  
Development on the Union Pacific Railroad***

PROVISIONAL PROPOSAL

February 3, 2020

Submitted by:

**Dennis Lawrence, AICP**

Executive Director

North Central Wisconsin Regional Planning Commission

210 McClellan Street, STE 210

Wausau, WI 54403

715-849-5510, Extension 304

[www.ncwrpc.org](http://www.ncwrpc.org)

With support from:

**Mark A. Bristol**

Asst. Vice President Network Development

Union Pacific Railroad

1400 Douglas St,

Omaha, NE 68179

MABRISTO@up.com

With tentative support from:

**Angelo Ventrone**

Vice President Logistics

Uline

12575 Uline Drive

Pleasant Prairie, WI 53158

262-612-4200

[aentrone@uline.com](mailto:aentrone@uline.com)

# NORTH CENTRAL WISCONSIN REGIONAL PLANNING COMMISSION

210 McClellan Street, Suite 210, Wausau, Wisconsin 54403  
Telephone: (715) 849-5510 Fax: (715) 849-5110  
Web Page: [www.ncwrpc.org](http://www.ncwrpc.org) Email: [staff@ncwrpc.org](mailto:staff@ncwrpc.org)



SERVING ADAMS, FOREST, JUNEAU, LANGLADE, LINCOLN, MARATHON, ONEIDA, PORTAGE, VILAS AND WOOD COUNTIES

February 3, 2020

Chief, Railroads & Harbors Section  
Wisconsin Department of Transportation  
4822 Madison Yards Way, 6<sup>th</sup> Floor  
P.O. Box 7913  
Madison, WI 53707

Subject: WisDOT Freight Rail Infrastructure Improvement Program (FRIIP)  
Application for an Intermodal Planning Grant

Dear WisDOT:

On behalf of North Central Wisconsin Regional Planning Commission (NCWRPC), please find attached an application for the Freight Rail Infrastructure Investment Program. Over the years we have had discussions with community and business leaders seeking access to rail, particularly intermodal service. This project supports making rail accessible in our region.

The FRIIP 2020 Intermodal Study grant application will study the impact of removing bridge height barriers to allow for the movement of double stack intermodal traffic and the feasibility of a terminal served by Union Pacific Railroad. NCWRPC has reviewed a copy of the application and an outline of a provisional application prepared by Prime Focus LLC. The study will include:

- The cost of removing double stack clearance obstructions in Wisconsin which impact the development of intermodal transportation in Wisconsin.
- The identification of intermodal service requirements, potential container volumes and a potential location of a terminal in the state, which would benefit Wisconsin users.
- Development of a business plan to identify the cost of terminal development.
- The preparation of a final report which outlines potential next steps for intermodal development in the Juneau County area.

If this proposal is selected for funding, NCWRPC will work with the qualified rail consultant team assembled by Libby Ogard and Prime Focus LLC. We already have support from the Union Pacific Railroad and are working on a 20% match from private sector. We will notify you of the matching fund status by the end of February.

Furthermore, as a federally designated economic development district we prepare a regional Comprehensive Economic Development Strategy. This project is consistent with the current Comprehensive Economic Development Strategy (CEDS) and it directly supports many of the goals, such as Goal 6 - Meet the full range of business infrastructure needs with an emphasis on transportation, utilities, and communications.

Our staff contact for this project will be Darryl Landeau, AICP, Senior Planner. He can be reached at 715-849-5510, Ext. 308 or at [dlandeau@ncwrpc.org](mailto:dlandeau@ncwrpc.org). His address can be found above on the letterhead.

Thank you for your consideration of this application.

Sincerely,

A handwritten signature in black ink, appearing to read "Dennis Lawrence", with a long horizontal line extending to the right.

Dennis Lawrence, AICP  
Executive Director

## 1.0 Project Parties

### 1.A Applicant:

**Dennis Lawrence, AICP**  
Executive Director  
North Central Wisconsin Regional Planning Commission  
210 McClellan Street, STE 210  
Wausau, WI 54403  
715-849-5510, Extension 304  
[www.ncwrpc.org](http://www.ncwrpc.org)

### 1.B Railroad Contact

**Mark A. Bristol**  
Asst. Vice President Network Development  
Union Pacific Railroad  
1400 Douglas St,  
Omaha, NE 68179  
MABRISTO@up.com

### 1.C Shipper/Industry Party:

**Angelo Ventrone**  
Vice President Logistics  
Uline  
12575 Uline Drive  
Pleasant Prairie, WI 53158  
262-612-4200  
[aventrone@uline.com](mailto:aventrone@uline.com)

### Supporting Agencies

The Prime Focus LLC team has met with the following agencies to secure their support and to discuss the conceptual analysis of a Union Pacific intermodal service if double stack clearances could be resolved. At this time these organizations are still evaluating opportunities to participate. No letters of support or financial commitment have been provided.

Given that we received commitment from Union Pacific on January 31, 2020, it is our intention, in the next two weeks to approach each of these agencies for a letter of support and/or funding contribution given the support of Union Pacific and Uline.

The commitment from Union Pacific to agree to this study was critical before we could attract shipper commitment. With receipt of this commitment our next effort is to identify other private sector stakeholders who are supportive of this effort. We intend to ask the following organizations for their support prior to February 7, 2020 with a deadline for written response by February 24, 2020. This is not a comprehensive list and will be further refined. Our strategic intent was to identify key stakeholders in each of three geographic areas which would align with the proposal terminal feasibility study areas for a UP intermodal terminal. Initially our concept was to look at Hudson, Necedah and Racine/Kenosha, WI.

Our intent is to identify a list of 30 companies and shipper groups to gain commitment for the remaining 50% matching funds to complete our provisional application. Our initial short list includes:

- Lake States Shippers Association
- Wisconsin Paper Council
- Wisconsin Counties Association
- Wisconsin Manufacturers Commerce
- Transportation Development Association
- Midwest Food Products Association
- Southeast Wisconsin Regional Plan Commission
- Port Milwaukee
- Ariens Distribution Center
- Blaine's Farm and Fleet
- Kohls
- FoxConn
- Amazon
- Harley Davidson
- Miller Coors
- Domtar
- Johnson Controls
- Midland Paper
- Wausau Paper Miles
- Sonoco
- Nekoosa
- Expera
- Verso
- Walmart
- Cooperative Network and Farm Bureau
- Wisconsin Transit and Realty
- Distribution facilities along I-94 between Madison and Minneapolis
- Others as suggested through the contact process

#### 1.D Project Description

##### **Provisional Union Pacific 2020 FRIIP Application Proposal**

**Objective:** To clear double stack Impediments to pave the way for intermodal service development in Wisconsin, connecting to the national freight rail network.

**Background:** Union Pacific (UP), a premier western railroad, operates as is a regional rail carrier in Wisconsin. Union Pacific and Norfolk Southern historically operated a Triple Crown rail service connecting the Upper Midwest domestic producers to Eastern consumers. The grant funds would be used to analyze and respond to the following questions:

*1. Is it feasible to re-establish a UP/NS Triple Crown like service with intermodal containers if double stack clearance impediments were removed?*

*2. Is there enough public benefit for Wisconsin shipper and highway travelers, to justify State support of the removal of double stack impediments?*

3. *Is there a potential intermodal terminal location in the state that could viably support the freight volume to sustain the revitalization of this network?*

4. *What are the required conditions for Union Pacific to agree to serve an intermodal terminal in Wisconsin? With UP, a business plan would be produced to identify the demand, costs, ownership and operation of a proposed WI intermodal facility?*

**Wisconsin has four primary problems which preclude intermodal service development:**

**1. Transcontinental Service Networks:** When CN purchased the Wisconsin Central, the state lost its regional rail service provision as CN's primary interest was to get from British Columbia to Chicago faster than other U.S. western railroad.

**2. Proximity to Chicago Intermodal Complex:** Wisconsin has a geography problem, while technically the most populated manufacturing centers are within the Chicago intermodal complex catchment area (less than 250 miles), practically current highway congestion and empty equipment sources make access to the nation's intermodal terminals in Chicago cost prohibitive.

3. The carriers that **could** initiate intermodal service in eastern Wisconsin (CP and CN) do not serve final markets for the majority of intermodal freight originated in the state. This results in a costly double handling of intermodal containers. Navigating through Chicago (CREATE) rail congestion can't compete with over the road service to Chicago.

4. UP railroad has double stack **clearance issues** in Wisconsin which preclude intermodal investment until these barriers are resolved.

**The Solution:**

Help UP resolve clearance issues and identify the viability of a joint rail line service that does not require the re-handling of containers in Chicago.

Intermodal service requires a railroad network which has terminals spaced appropriately to minimize end to end transit times, with adequate sidings and clearances to support the competitive freight rail train speeds. The Union Pacific has access to the Port of Milwaukee, Minneapolis-St Paul and Duluth, but the Union Pacific Rail Network in Wisconsin is limited to single stack intermodal trains due to insufficient bridge clearances. The economic benefit of intermodal service for the Class 1 railroads is only realized when the carrier can double stack freight. For Union Pacific to be a viable competitor in the State of Wisconsin, providing connections to important Midwestern Markets, these insufficient bridge clearances must be resolved. The Union Pacific is interested in the identification of these bridge clearance issues and a public private program to remove these obstructions

Wisconsin has three other transcontinental railroads which traverse the state and provide good international service, but these networks compete with each other to provide West Coast connectivity to Chicago, IL. Many trains are full, or the economics of these networks can't justify domestic intermodal service in Wisconsin, with a hand off to an eastern carrier in Chicago. While eastern Wisconsin shippers are technically in the catchment area of the Chicago Intermodal complex, accessing empty equipment and navigating a congested I-94 corridor to Illinois is cost prohibitive. Wisconsin would benefit from a regional railroad with a dedicated interchange service like Triple Crown which would eliminate the

double handling cost to load/unload containers in Chicago – yet provides service to eastern U.S. consumers.

The 2020 FRIIP program is a vehicle to identify the public benefit of developing intermodal service in Wisconsin by removing double stack barriers. The grant requires a public agency to be the grant applicant, 20% private sector match for state funds and the development of a business plan to support the demand requirements identified by stakeholder outreach.

The final report would be a valuable document to justify terminal investment and could be used to improve Federal Grant applications such as CRISI, Infra or BUILD.

#### **Six Proposed tasks:**

1. Identification of **clearance impediments** to UP intermodal service in Wisconsin.
2. Identification of **Demand** - domestic and international shippers, volume, lanes, transit time, service and handling requirements, identify potential anchor tenants.
3. Identification of **Supply** - equipment, terminal requirements, drayage, support services, rail service, warehouse cross dock, transloads, equipment provisions, chassis.
4. **Identify up to 3 potential rail sites** which can meet the demand requirements.
5. Develop a **business plan** to support the top terminal location to include, terminal cost to build, operate, maintain and the management structure, support facilities, ownership structure, funding options, volume projections, service design necessary to support demand.
6. **Implementation**, Alternatives and final report.

#### **Organization Structure:**

- North Central Wisconsin Regional Plan Commission would be the “Applicant” and would contract with WI DOT and submit FRIIP grant application.
- Prime Focus LLC Team would complete the work with support and engagement with Union Pacific Railroad.
- An advisory committee from the region of not more than 5 individuals will be assembled.
- Study anticipated to start May 2020 and complete April 2021.
- Union Pacific participation.

#### **TEAM: Qualified Expert Team**

Libby Ogard – Prime Focus LLC Lead project manager will focus on demand.

Ben Guido – Via Rail - Engineer and site selection expert, will also support business plan.

Todd Ericksrud – Matchback Systems – will collect shipper data and support supply.

John Ducan Varda – Dewitt LLP– will provide shipper association safe harbor to collect actionable shipper’s data.

Dr. Richard Stewart – UW Superior – QAQC

Steve Rose – Redwood Logistics shipper identification

David Wilson – Retired Wisconsin Central to help identify historic shippers

#### **Summary:**

Wisconsin ships both domestic and international freight and would benefit from the ability to increase rail volume yet lacks intermodal access. The state provides two rail programs to support shipper access and to preserve rail infrastructure. A partnership with UP is desired to

examine options to expand intermodal rail. A letter of support from UP is required and a financial contribution to the study would be appreciated.

1. E Alternative and consequence (impact) if the assistance is not awarded

If not awarded funding in this round we will continue to solicit support from shippers and work with the Union Pacific to develop the proposal further.

2.0 Estimate of Project Study Cost and Performance Method

2. A Line Item breakout of direct project costs

The term of the study is anticipated to be a 12-month period. The following task labor and direct costs are included in a draft budget listed below.

WISCONSIN FRIIP ANALYSIS		\$240,000 Task Budget	
Task	Budget Estimate (Percent of Budget)	DRAFT	
1. Identification of Clearance Issues	3%		\$7,200
2. Estimate of Intermodal Demand	30%		\$72,000
3. Estimate of Terminal Requirements, Location, Rail Service Connections	25%		\$60,000
4. Site Evaluation	10%		\$24,000
5. Business Plan	15%		\$36,000
6. Final Report	15%		\$36,000
Direct Expense	2%		\$4,800
<b>Total Project Cost</b>	<b>100%</b>		

2. B Description or methods proposed for accomplishing study work tasks

**Task 1 – Clearance Identification**, Wisconsin Transit and Reality Group has identified a study which was completed to eliminate 12 double stack impediments in Wisconsin. It is assumed that this is a confidential report that we are trying to gain access to. The team will work with Wisconsin Reality Group and Union Pacific to identify double stack clearance obstruction locations and the cost to eliminate these obstructions.

**Task 2 - Demand validation** which would include interviews and data collection from Shippers, Intermodal Marketing Companies, freight forwarders etc. Deliverable will be an actionable shipper data base which will include container volume, seasonality, service requirements, lanes, equipment requirements, storage, chassis etc. As in Duluth Cargo Connect the assumption was that equipment would flow to the terminal, we will also identify if there is a need to transload at the terminal (Like Duluth Cargo Connect). A list of Anchor tenants will be provided.

**Task 3 – Supply** will identify the terminal requirements identified in the Demand task. Equipment providers, Ocean Carriers, Drayage Firms, along with material handling and cross dock providers will be identified to gauge their interest and capacity to support this intermodal service.

**Task 4 – Site search.** With Union Pacific, identify up to three potential sites where rail access and land is available to support demand volumes and service lanes identified in Task 1. Leading conceptual locations include Hudson, Necedah, Racine/Kenosha, Wisconsin. (can change)

**Task 5 – Business Plan development** - A business plan will be developed for the leading site. The business plan will include an organization chart, volume projections, service offerings, rail service plan, management and ownership structure, employment requirements, costs, funding options and competitive threats. This will inform a benefit cost analysis for a federal grant application.

**Task 6 – Implementation, next steps, and final report to support federal grant applications.**

### 3 Proposed Study Financing

#### 3.A Identify dollar amount of requested assistance:

The applicant requests a \$200,000 grant from Wisconsin DOT and will match these funds with \$40,000 in cash from stakeholders. The budget assumes full \$200,000 from the WisDOT FRIIP program and \$40,000 match from private sector. At this time the proposed budget to support this effort is still in draft stage.

#### 3.B Grant funds Source

Wisconsin Department of Transportation

#### 3.C Source of Matching Funds (no less than 20%)

Shippers interested in the use of Union Pacific Intermodal Service, of which one firm has pledged \$20,000 based upon the final scope of the study. Thirty others will be invited to participate in the next three weeks.

### 4.0 Intended Benefit and Cost Items

#### A. Reduced highway maintenance (State of Good Repair)

The team will estimate the highway maintenance cost of mode conversion as a percentage of Average Daily Truck Traffic currently using existing freight network in the state.

#### B. Safety through mode conversion

As a result of shipper and stakeholder use estimates an estimate of safety benefits will be calculated suitable for use in a UILD or CRISI Grant application.

### 5. Intended Environmental and Economic Enhancement Items

#### A. Reduced Green House Gas

The identified volume which can be converted to intermodal service will be used to calculate environmental benefits suitable for use in a Federal Grant BCA model.

#### B. Improved Economic Competitiveness

The identified volume which can be converted to intermodal service will be used to calculate economic benefits suitable for use in a Federal Grant BCA model.

#### C. Increased Market Reach

Based upon actionable shipper data, total estimated intermodal conversion will inform an analysis of market reach.

#### D. Anticipated job creation

Based upon total estimated annual shipment data collected in the actionable shipper data collection effort, based upon select representative terminals which have been built, an estimate of job creation will be provided as a result of actual terminal development.

### 6. Wisconsin Containers

#### A. Anticipated number of Wisconsin Containers

Depending upon the final highest and best use location selected by the Union Pacific and the stakeholders estimate of volume, the team will estimate total number of containers which can be moved from highway to rail service. We know that the UP/NS Triple Crown service at one time moved more than 700,000 container units per year. The potential for local and through freight is substantial but will depend upon rail service and rail rates for which we do not have enough information to estimate total volumes at this time.

### 7. Access to Warehouse Space

#### A. Access to Dry warehouse

The Union Pacific railroad parallels the I94 corridor between the Illinois State Line and Milwaukee. This region has grown substantially in the past 10 years with significant Amazon, Uline and Foxconn warehouse investments. The I-94 corridor between Madison and Stout has a more mature warehousing ecosystem which is anchored by Walmart and others. The Hudson, WI area has a bi-state reach. Between now and before March 1, 2020 the applicant/study team can identify a list of warehouses in the catchment area of each of the proposed terminal locations.

#### B. Access to Refrigerated warehouse

The application and study team will work with the Midwest Food Products Association to identify refrigerated warehouses in the catchment area.

### The Former Triple Crown Rail Network

The overall goal of this project is to identify opportunities to eliminate the Wisconsin clearance obstacles and reinstate service on the network shown below to facilitate mode conversion. Three terminal locations will be identified in Wisconsin that could support the revitalization of this network. Only one business plan will be prepared for the terminal most likely to succeed in a competitive landscape.

***Union Pacific is Regional Railroad with capacity to grow, not a Transcontinental Railroad in Wisconsin, using the State infrastructure as a pass-through connection.***

Inaugurated in 1986, Triple Crown (TC; a subsidiary of Norfolk Southern), is a bi-modal transport network servicing the eastern part of the United States, including southern Ontario, Canada and connects with the Union Pacific railroad in a lane to Minneapolis, MN. It used a hybrid technology using RoadRailers to form unit trains that can be composed of up to 150 trailers.



From an initial service of 150 trailers between California and Chicago, the network grew to a fleet of 7,000 trailers servicing 14 dedicated terminals and accounting for more than 700,000 movements annually. Also, about 850 drivers are used for regional drayage. The network was structured in a classic hub-and-spoke design with Fort Wayne, Indiana acting as the hub. Trailers are picked up from customers and brought to the nearest TC terminal, generally over a

distance of less than 200 miles (325 km). At the terminal, trailers are assembled into convoys by being latched onto bogies to form an intermodal unit train that will be forwarded to the hub (Fort Wayne). At the hub, trailers were rearranged into convoys for their respective destinations where trailers will be unlatched and drayed to the final customer. Segments of this service have survived. However in 2015, NS started to scale down the Triple Crown network, particularly because of shifts in the domestic demand dependent on the automotive sector. The long-term goal is to switch to a fully containerized system (domestic and ISO containers). The route via the Union Pacific in Wisconsin was discontinued because of the lack of double stack clearance.