

Cincinnati Rail Congestion Mitigation Plan (PID 121643): Scope of Work

Project Overview:

The Ohio Rail Development Commission (ORDC) seeks a consultant to prepare the Cincinnati Rail Congestion Mitigation Plan (Project). The Project will review and prioritize a variety of preliminary railroad projects in southwest Ohio by investigating the impacts they would have on rail congestion in and around the Queensgate rail yard in Cincinnati, Ohio.

Background:

The Cincinnati Rail Congestion Mitigation Plan is a planning project to be undertaken by the ORDC in partnership with Norfolk Southern (“NS”), CSX, the Indiana & Ohio Railway Company (“IORY”), and the Central Railroad of Indiana (“CIND”). Queensgate Yard in Cincinnati, Ohio, runs parallel to Interstate 75 and is approximately two miles north of the Brent Spence Bridge and the Ohio River. Queensgate Yard is a large freight classification yard and intermodal terminal in CSX’s system. Immediately east of Queensgate is NS’s Gest Street intermodal facility, with the NS Sharonville Intermodal facility to the north and the connection with CIND to the south. The interactions between a large, important classification yard, intermodal facilities, and interchange actions between railroads in the area create significant freight rail operation and congestion issues.

Accompanying this congestion is an increase in blocked railroad-highway grade crossings and other community impacts such as stopped and idling trains. The Project is intended to address the rail issues in the Cincinnati region by evaluating capital projects identified by the railroads and creating a prioritized capital project list designed to mitigate the congestion issues. With a prioritized list, all parties involved can then begin partnerships to address issues systematically and efficiently through a comprehensive, fiscally-sound process.

CSX’s Queensgate Yard is one of the largest rail classification facilities in North America. With a length of approximately five miles and containing over 80 miles of track, Queensgate is the fourth largest yard on the CSX network by volume, with nearly 650,000 carloads processed through the facility in 2023. For CSX, Queensgate Yard is one of the last remaining hump yards on the network. Each day, on average, 35-40 CSX trains per day traverse Queensgate in service to local and regional customers as well as long haul transit for freight and through traffic with crew change requirements. In addition, CSX operates a mechanical shop at Queensgate where locomotives and rail cars are inspected and maintained in accordance with federal regulations. CSX’s intermodal yard at Queensgate is also operating at over 100% capacity, which, while a testament to the dedication of CSX’s employees, is not sustainable.

NS provides intermodal service to the region through two intermodal yards: Gest Street and Sharonville. The Sharonville Yard is primarily international intermodal service to the ports of Charleston, Savannah, Norfolk and New York / New Jersey. Gest Street Yard handles almost exclusively domestic traffic for Florida and the West Coast via Chicago. Merchandise service in

the Cincinnati area is handled in three locations with Gest Street, Sharonville, and Middletown providing local service operations. Cincinnati is a critical link in the NS network and the primary conduit between the northern and southern portions of the NS network. At Gest Street there are an average of 30 scheduled trains operating daily, in addition to local operations, yard transfers, and unscheduled unit trains. Gest Street and Sharonville are constant points of activity with every train traversing Cincinnati having to stop to change train crews, and 14 scheduled train work events daily. Due to the configuration of the NS and CSX networks and multiple yards and lines converging into the Cincinnati region, Gest Street is a frequent operational bottleneck due to the high volume of trains and competing/conflicting moves over the shared main line tracks north of the yard.

The CIND interchanges 100% of its rail traffic on the south side of Queensgate Yard. CIND and the IORY use the Queensgate area to connect to NS. CIND also connects with CSX at Queensgate to pick up and drop off rail cars.

Given the high volume of trains (a minimum of 65 daily) in the area, the fact that multiple railroads must coordinate activities, and the limited physical footprint of Queensgate and the surrounding lines, operational fluidity in the Cincinnati area is a challenge. Any disruption to the normal operation of trains in the area can result in a region-wide slowing of rail traffic, creating significant problems for communities across the project area and impacting deliveries to customers across Ohio and the Tri-State (Ohio-Kentucky-Indiana) region.

The lack of operational fluidity in the area creates significant issues for the communities in the area, the railroads, and their customers. While the railroads have and continue to invest in their infrastructure in the area, due to the complexity of operations in the area, any improvements undertaken by one railroad without coordination with the others may inadvertently negatively impact other railroads operating in the area.

Occupied crossings are also a major issue in Ohio communities both near, such as St. Bernard and Lockland, and far, such as Eaton, a community located over 40 miles from Queensgate. Of the 890 Ohio crossings that were the subject of reports to the FRA's Public Blocked Crossing Incident Reporter website since 2019, 119 of these crossings are located in a 25-mile area around the Queensgate Yard. The numerous rail/highway grade crossings in Hamilton and Butler counties, which have total daily traffic counts of 1.2 million vehicles and 3,200 trains, and the lack of sufficient rail or yard storage combine to exacerbate the blockage of crossings and cut off east-west connectivity for Cincinnati-area communities from St. Bernard to Sharonville.

The Cincinnati Rail Congestion Mitigation Plan is tailored to begin solving the difficult problem of improving operational fluidity in the Queensgate area. ORDC and the project partners have developed a number of preliminary project ideas to help improve congestion in and around Queensgate. Due to confidentiality restrictions, the lists of preliminary project ideas will be shared after consultant selection. The scope of the Plan is to review and prioritize these projects by investigating the impacts the projects would have on rail congestion in the area.

Whereas in a normal process, each railroad would evaluate projects solely based on the extent to which they would improve congestion for their own networks, by taking this larger, more encompassing approach, ORDC hopes to find projects that both improve fluidity for *all* railroads in the area while also maximizing public and private benefits for all stakeholders.

Anticipated Scope of Work:

Below is a list of tasks to be completed during the Project.

Task 1: Contract Management

The selected consultant will work with commission staff to manage work activities. These activities include administrative functions, regular conference calls, status updates, and preparation of required project deliverables.

Deliverables:

Invoices
Regular progress reports

Task 2: Project Development Plan

The selected consultant will develop a Project Development Plan to include the methodology by which projects will be evaluated and a plan for stakeholder involvement.

Three groups of stakeholders have been identified.

Primary: Norfolk Southern, CSX, Genesee & Wyoming (Central Railroad of Indiana and Indiana & Ohio Railway)

Secondary: Cincinnati Eastern Railroad, Amtrak, Indiana Eastern Railroad

Tertiary: Regional public stakeholders (i.e. metropolitan planning services, emergency services)

The primary stakeholders will be closely involved in project evaluation and plan development and this coordination should be reflected in the Project Development Plan. Due to the confidential nature of project development, stakeholder involvement will likely need to be completed by individual railroad, instead of groups of railroads.

Deliverable:

Project Development Plan

Task 3: Plan Development

The selected consultant will prepare a draft and final project list that details a relative ranking of the projects submitted by the various railroads in the Queensgate area. The final project list will be developed by evaluating the following factors:

- Effects on congestion and fluidity in the Queensgate area (the primary criteria);
- Ability of the project to address congestion and fluidity on a standalone basis and/or in combination with other projects;
- Estimated cost;
- Ease of engineering and construction, such as the extent of engineering required to progress to final design;
- NEPA challenges, with considerations taken based upon potential funding sources;
- Environmental considerations, including emissions and climate change impacts;
- Right-of-way acquisition requirements/challenges;
- Safety considerations, such as the reconfiguration/closure of highway-railroad at-grade crossings, or potential safety improvements in Queensgate Yard for railroad personnel;
- Impacts of the project on at-grade crossings;
- Timeline considerations, such as materials acquisition requirements; and
- Other factors as relevant.

A technical memo will describe and summarize these factors and describe how they are incorporated into the relative project ranking.

Deliverables:

Technical Memo describing the evaluation factors and their inclusion in the prioritization.

Final, Prioritized Project List that demonstrates the factors impacting each potential project's priority on the list

Work is anticipated to begin in the second half of 2025 and be complete by the end of calendar year 2027.

Requirements of the Team:

The successful consulting team will include individuals with the following expertise:

- Railroad network analysis and planning
- Stakeholder involvement