



NWI Rail Crossing Task Force: Summary Report



Prepared by

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NWI Rail Crossing Task Force: Summary Report

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Introduction

In September 2018, the Indiana Supreme Court struck down a state law that allowed local governments to ticket and fine trains who blocked crossings for undue amount of time.

The ruling brought state law in line with federal law which gives the federal government preemption over the issue. Local communities in the NIRPC region of Lake, Porter and LaPorte Counties have observed that since the ruling, the issue of trains blocking at-grade crossing has only become worse.

In December 2018, NIRPC organized the Rail Crossing Task Force (RCTF) comprised of local officials and stakeholders to discuss the Supreme Court case, its impacts on the quality of life and safety issue confronting our region, and options to address the issue. Subsequent meetings of the RCTF took place in March, May and October of 2019. The following report represents a summary of the findings from these four meetings.

Understanding the Impact

Due to the proximity of the City of Chicago and Lake Michigan, the NW Indiana region experiences a significant amount of railroad traffic. Today, the three-county region of Lake, Porter and LaPorte Counties are crisscrossed by nearly 700 miles of critical rail corridors and dotted with at-grade crossings. Taken together, these contribute to the State of Indiana ranking sixth in the United States for rail crossings.

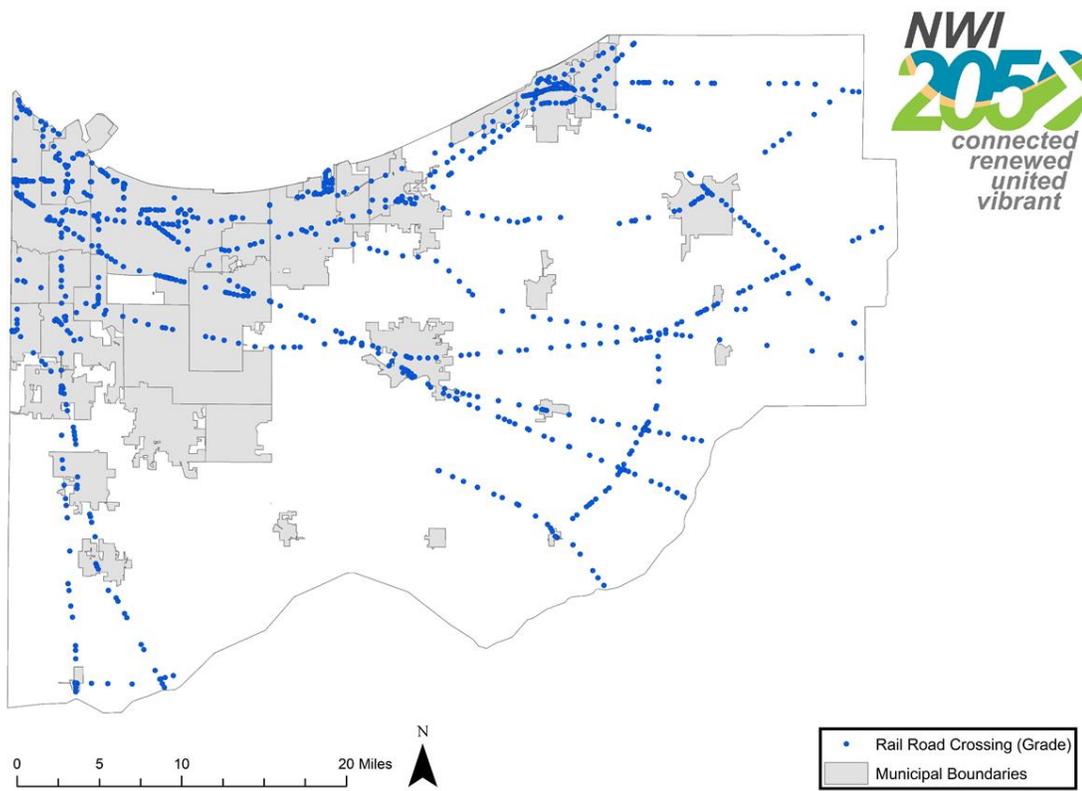
These at-grade crossings present challenges to our communities to keep roadway traffic moving safely and efficiently when trains pass through the crossing, and in turn temporarily close the road. There are several instances where these crossings are blocked by stopped trains, and sometimes for hours on end.

Currently five major railroads conduct operations in the NWI region. These include:

- Class I Freight Railroads:
 - Canadian National
 - CSX
 - Norfolk Southern
- Passenger Railroads:
 - South Shore Line
 - Amtrak

In all, these major railroads represent the vast majority of the 886 at-grade crossings that exist in NWI today, and are highlighted in Figure 1.

Figure 1: Existing At-grade Rail Crossings in NWI



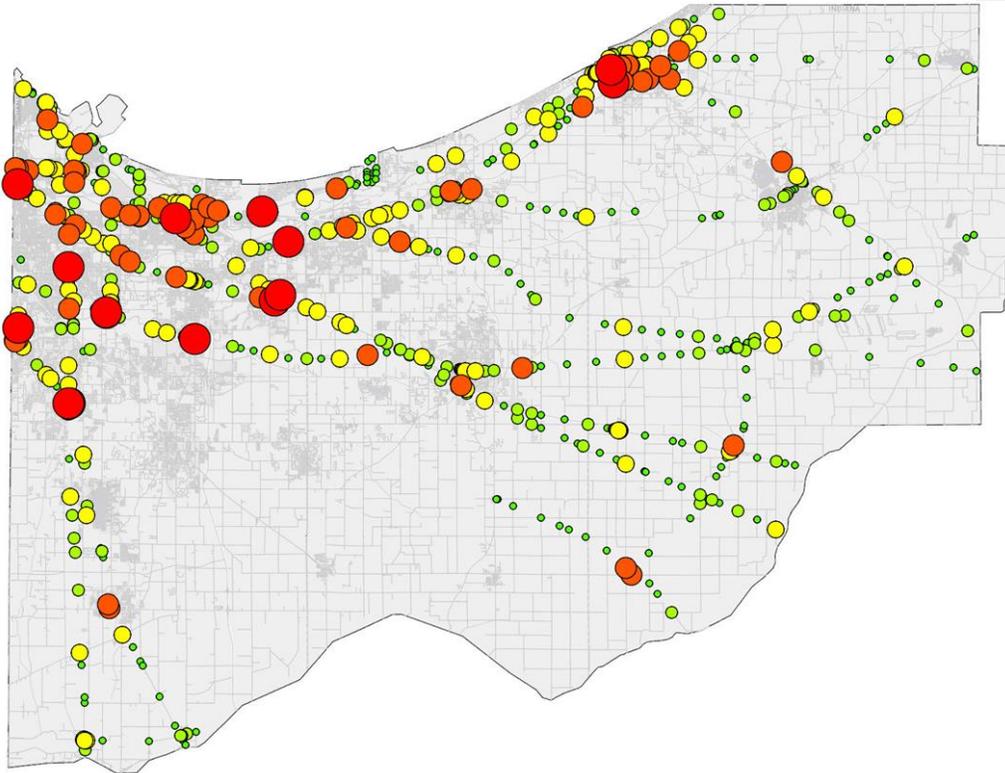
NIRPC is working on to update its 2013 At-Grade Crossing Report, but an early analysis in this update has factored in the following:

- Crossings near schools
- Crossings near fire stations
- Crossings near hospitals
- Crossings over important corridors
- Crossings over congested corridors

Figure 2 graphically highlights the key at-grade crossings to be further investigated. The map displays the range of impact at-grade crossings may have on NWI. Crossings noted in red are nearest to schools, fire stations, hospitals, are on important corridors, or could be congested

corridors. On the other end, crossings noted in green feature only a few of those issues of concern.

Figure 2: Impact of At-Grade Crossings



Safety Concerns

General data on rail crossings in NWI indicate a clear concern for improving safety. The Federal Railroad Administration (FRA) has reported that Indiana is tied with Louisiana for the most at-grade rail crossing related fatalities in the U.S.¹ From 2007 to 2016, there were 133 deaths reported, with only 37.2% of crossings having a full warning system of flashing lights and gates. Data confirms that the risk of crashes is significantly reduced by 88% with these safety mechanisms in place.

¹ INDOT Rail Plan

From this statewide data, NWI has experienced five deaths and seven injuries, with Lake and LaPorte Counties having the highest number of crashes from 2014-2016.

There are currently 1,086 active rail crossings in Northwestern Indiana. With 82% of NWI's crossings at-grade this means delays – hopefully for only a couple of minutes – but if and when trains have their own red signal, this can mean blocked crossings for all roadway users including cars, buses, bicyclists and pedestrians. Delays due to train crossings are inconvenient at best, but at worst can be serious safety hazards if near schools, fire stations, or hospitals.

Schools

With so many at-grade crossings in NWI, it is hard to not have an impact on everyone. However, the impact on school children can be serious as they are vulnerable users of our transportation system. Nearly ½ of all schools in NWI are within ½ mile of a crossing. It has been reported by local officials that when crossings are blocked, children and their parents are unsafely crossing between rail cars to get to school.

Fire Stations

As with schools, nearly ½ of all fire stations in NWI are near an at-grade railroad crossing. This presents a hazard of delayed response times to emergencies if railroad crossings are blocked. Many of the freight trains coming through NWI are what are known as “unit-trains” carrying a single car type and can be up to two-miles in length. If a train is stopped, it is not just one crossing that is blocked, but all crossings along the length of the train.

Hospitals

Hospitals are just like schools and fire departments in NWI – 50% are within ½ mile of rail crossing. If a crossing is blocked, especially by a long freight train, this can make it impossible for emergency responders to find a quick alternative route to get to a hospital or fire station. Blocked crossings are also a quality of life nuisance due to the fact that idling trains and cars waiting for crossings to clear are unnecessarily emitting pollution all to wait. This is a public health issue that is avoidable.

Magnitude of Issue

Over time, the number of rail crossings in NWI has produced a strain on all intended users of the roadways. These include both motorized and non-motorized operators. NIRPC's 2013 study revealed that some crossings have as many as 90 trains-a-day passing through.

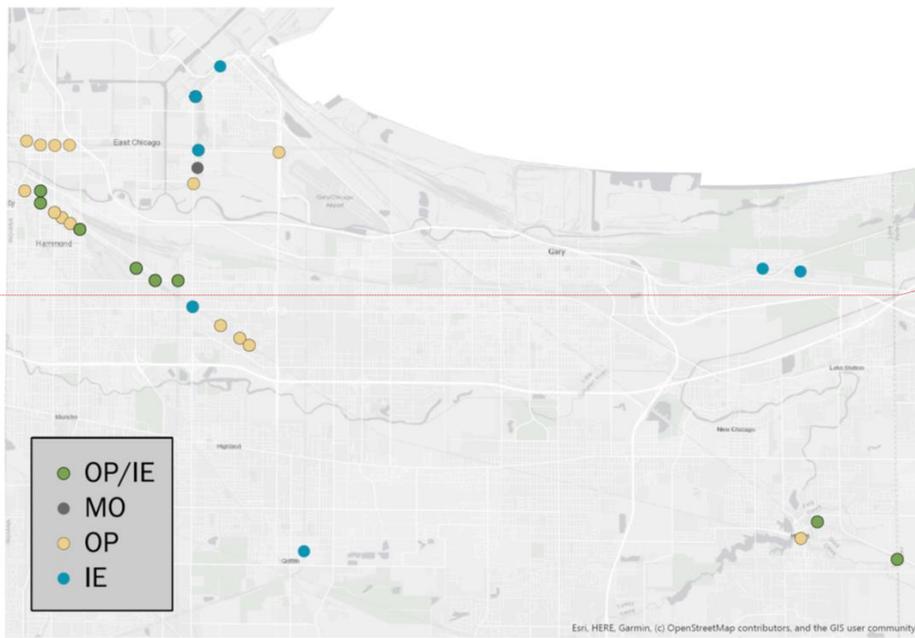
The length of delay depends on the number of trains and length of trains. The 2013 study also revealed that the worst crossings in NWI closed their gates for approximately 1.5 to 7.5 minutes per closing. Since the Indiana Supreme Court decision removing a municipality's ability to ticket for prolonged blockages, it has been observed that these delays have become even more severe, with some blockages of 1-2 hours in Hammond and elsewhere.

Outside of the data analysis prepared by NIRPC staff, William Moore of EME Rail Solutions, LLC presented at two RCTF meetings on his findings. These involved on-site evaluations of blocked rail crossings in the NIRPC region from January to July of 2019. Based on his findings, causes for blocked crossings are categorized as follows:

- **OP – Operating Practices and Procedures**
Blocked crossing events caused by the length of train (service design), dispatching decisions (locations where trains can be held waiting to advance) and other operating protocols regarding the operation of trains through a specific area.
- **IE – Infrastructure/Engineering Characteristics**
Blocked crossing events caused by a train moving through a section of track such as crossover, connection track, non-signalized track, yard that has a speed restriction (lower authorized speed limit) due to the physical/engineering characteristics of that section of railroad.
- **MO – Mechanical Failure/Other**
Blocked crossing events caused by a mechanical failure with a train that requires the train crew to stop and inspect the train and make repairs if needed.

Figure 3 shows where each of these blockings occur in NWI.

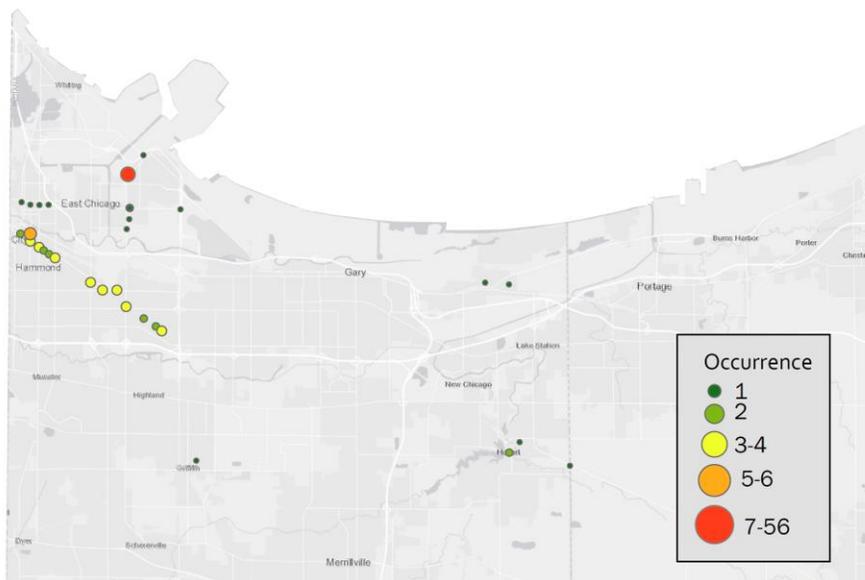
Figure 3: Cause for Blocked Crossings



Commented [A1]:

Indiana state law specifies that public travel cannot be blocked for more than 10 minutes by any train, railroad car or engine (Indiana Code §8-6-7.5-1). Unfortunately, several crossings in NWI, specifically Hammond and East Chicago, encounter an abnormal number of blockages beyond this 10-minute limit as shown in Figure 4.

Figure 4: Crossings Blocked Longer than 10 minutes (May – July 2019)



The entirety of Mr. Moore’s findings as presented are located in Appendix A of this report.

In addition to the concerns already highlighted, at one RCTF meeting the Hammond Chief of Police Edwin Bergeron commented on the high incidence of “road rage” which takes place due to longer-than-average blocked crossings. He states that many who are waiting will look to U-turn out of the queue, which causes friction with other motorists. He has reported several incidents due to blocked crossings.

Apart from the delays impacting vehicular movement, there have been a number of issues arising from implementing safe crossing measures for off-road trails. In NWI and the southern Chicago suburbs, railroads have consistently delayed trail projects where at-grade crossings are necessary. Of prime note are projects in the Village of Burnham, IL, and Michigan City.

In both cases, railroads have requested a number of conditions that have put considerable pressure on the local entities to remedy. These conditions have placed an undo burden on non-motorized traffic over those using the roadway. Some of these conditions, including “cattle gates” that aim to have bicyclists dismount before crossing a railroad, most often times result in

these users avoiding them entirely by riding into the street, and into vehicular traffic. A cattle gate design is shown in Figure 5.

The RCTF does recognize the concern of railroad companies about pedestrian and bicycle safety at their crossings, but these concerns must also be balanced with requesting reasonable safety measures that have proven to be effective.

Figure 5: “Cattle Gate” Design in Whiting



Remedies

The overwhelming consensus of those present during the RCTF meetings was to act immediately before the situation worsens. Of specific note is INDOT’s Freight Plan which puts Lake County in the top spot for estimated freight traffic growth in Indiana by 2045. Furthermore, Railroads are also examining autonomous trains which could increase the frequency and reduce the amount of distance between trains – this would only make at-grade crossing delays worse for drivers, walkers, bicyclists, and bus riders.

Infrastructure

Railroads consistently argue that the safest course of action for problematic at-grade crossings are bridges or tunnels to separate the uses. However, NIRPC’s 2013 study estimated the cost to separate the worst crossings in NWI – just nine crossings in all – was almost \$200 million. INDOT recently made funding available to separate crossings through a one-time grant program *LocalTrax*, but NWI secured \$45 million in funding for just five projects.

Fixing the issue of blocked rail crossings with infrastructure solutions is extremely expensive; therefore, alternate solutions are needed to remedy our crossings from being blocked due to train idling.

Technology

At the October RCTF meeting, Jon Newhard and Marshall Cheek from Cubic Transportation Systems presented on their firm's experience with innovative data collection and traffic signal technologies. Their presentative covered a number of products and can be found in Appendix B.

Legislative

The 2018 Indiana Supreme Court decision was based on a lawsuit brought by Norfolk Southern in requesting relief from fines being levied from the City of Fort Wayne for excessive blockages. By doing this the court struck down provisions of IC 8-6-7.5-1 – or the 10-minute rule as previously mentioned, and found that this statute was expressly preempted by Federal law.

At the Federal level, there are two agencies assigned to regulate rail traffic in the United States. The first is the FRA, and the other is the Surface Transportation Board (STB). The STB handles complaints about blocked crossings. One such complaint dealt with blocked crossings in the south Chicago neighborhood of Beverley in 2016. However, after two years of reports by CSX on their efforts to remedy this matter, the STB could not reach a consensus on moving forward. As such, the STB under current Federal provisions seems unable to provide relief to this matter.

Outside of the existing channels would be to lobby Congress to pass legislation that directs the FRA and/or the STB to promulgate rules concerning the issue of blockages. At this time Congress is debating new transportation authorization language, and the time may be right to bring this matter up for inclusion. NIRPC Counsel David Hollenbeck produced a detailed memorandum on these matters which can be found in Appendix C.

Conclusions

The four meetings of the Rail Crossing Task Force derived a number of positive benefits going forward towards ultimate remediation of the problems facing communities. These include:

1. Heard from parties about multiplicities of impacts (e.g., "road rage" as well as safety blockages)
2. Understanding the challenges involved in rail operations
3. Established lines of communication with rail entities
4. Learned about other initiatives to attempt to address this issue (e.g. state bill attempt, limitations of Surface Transportation Board)
5. Connected with all our Federal reps on this issue in DC (special thanks to Congressman Visclosky's office)
6. A better understanding of potential technological innovations

Going forward, it was agreed by all parties that improved data collections was established and should be ongoing. This could factor significantly for future Federal actions on the matter. In addition, these meetings brought together an expanded pool of interests to help track the issue and create a clearer picture of the problems.

The RCTF succeeded in providing a needed spotlight on the issue, which was first advocated by Hammond Mayor Thomas McDermott, Jr. in a Twitter comment sent in October of 2018 shown below.



Going forward, NIRPC will continue to work with stakeholders to collect data, collaborate with railroads and push for legislative relief to help improve the quality of life of residents of, and visitors to NW Indiana.