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Cynthia T. Brown
Section of Administration
Office of Proceedings
Surface Transportation Board
395 E Street, S.W.
Washington, D.C. 20423

Re: No. FD 35087 (Sub-No. 8), Canadian National Railway Company and Grand Trunk Corporation – Control – EJ&E West Company

Dear Ms. Brown:

On behalf of the Village of Barrington, IL, I respectfully request the Board, pursuant to 49 C.F.R. 1002.2(e)(1) to waive the filing fee for the Petition to Reopen filed this date by the Village of Barrington in FD 35087 (Sub-No. 8).

Very truly yours,

Richard H. Streeter
Counsel for the
Village of Barrington, IL

RHS:rs
Enclosure
cc: All parties of record

FILING FEE WAIVED

Before the

SURFACE TRANSPORTATION BOARD

Finance Docket No. 35087 (Sub-No. 8)

CANADIAN NATIONAL RAILWAY COMPANY AND GRAND TRUNK CORPORATION – CONTROL – E J & E WEST COMPANY

PETITION SEEKING IMPOSITION OF ADDITIONAL MITIGATION PURSUANT TO THE BOARD'S OVERSIGHT JURISDICTION AND REOPENING BASED ON MATERIALLY CHANGED CIRCUMSTANCES PURSUANT TO THE BOARD'S GOVERNING REGULATIONS

The Village of Barrington, Illinois ("Barrington"), by and through counsel, respectfully files this Petition seeking reopening pursuant to 49 U.S.C. § 722(c) and 49 C.F.R. § 1115.4, which provide that a petition for reopening "must state in detail the respects in which the proceeding involves … new evidence, or substantially changed circumstances and must include a request that the Board make such a determination." Barrington requests this action to enable the Board to provide oversight mitigation in the form of a grade separation at the intersection of U.S. Highway 14 and the EJ&E Line pursuant to the Board's retention of jurisdiction to impose additional conditions and take other actions to address newly developed information that – in this case –demonstrates both the carload movements and actual impacts of the transaction go far beyond what the Board had envisioned when imposing its original mitigating conditions on Canadian National Railway ("CN"). *See* Decision No. 16, December 24, 2008, at 25-6 and *Board's Final Mitigation Condition* No. 72.

Reopening Is Required In Order For The Board To Evaluate The Impact On Barrington Of Entirely New, Rapidly Developing Rail Markets That Were Unanticipated When CN Filed Its Application In 2007.

When it filed its application on October 30, 2007, CN relied on several general operating and market service assumptions that were articulated in the Verified Statement of David A. Stuebner. In his introductory remarks, Mr. Stuebner explained that:

> I was asked by CN to estimate the volume of rail traffic likely to be gained by the integrated system after the full implementation of the proposed CN acquisition of EJ&EW (the "Transaction"). I understand that this information is required for purposes of CN's operating plan as well as for ***the Board's assessment of the potential environmental impacts of the Transaction***.[1]

In assessing the anticipated traffic gains to be generated by the combined CN/EJ&E system, Mr. Stuebner outlined the following general assumptions:

- 2006 traffic data are the best general source of available information about likely traffic gains as a result of the Transaction.
- The environment of the railroad industry is that which existed on December 31, 2006, except for the direct effect of the Transaction on traffic, which I estimate as if the Transaction were fully implemented.[2]

He then concluded that "***I do not anticipate any gains to CN/EJ&E of entirely new business in which neither CN nor EJ&E had any participation in 2006.***"[3] He also estimated "that CN/EJ&EW would gain

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[1] V.S. Stuebner at 191-92 (emphasis added).
[2] Id. at 193.
[3] Id. at 197 (emphasis added).

extended hauls for 9,737 carloads of traffic due to the Transaction within approximately three years of consummation … [and would realize] additional gross revenues attributable to these gains to be $14.86 million."[4] Those conclusions and his underlying assumptions have been made entirely obsolete by recent energy-related market developments on CN's rail network. As his Verified Statement demonstrates, Mr. Stuebner, did not include any of these volumes in his projections. As a result, the "energy renaissance" was not taken into consideration when the Board fashioned mitigation based on SEA's finding that CN's "rail traffic forecasts were reasonable and reflected the maximum amount of traffic that would likely move on the EJ&E line in 2015."[5]

Recent public pronouncements issued by CN, including its Third Quarter 2014 Financial Results Conference Call held October 21, 2014; CN's 2013 Investor Fact Book; and CN's Investor Fact Book 2014 Update, conclusively demonstrate that the continuing expansion of the "energy renaissance" in North America has had (and will continue to have) significant impacts that were never considered by the Board. As CN, itself, conclusively proves, the projections upon which the Board relied were woefully inadequate.

As CN's Investor Fact Book 2014 Update reveals, the number of carloads of crude oil has increased from only 216 carloads in 2010, to 34,077 in 2012 and 73,035 in 2013. According to CN, this is only the beginning. In its comments to the financial community, the statement was made that from "the

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[4] Id. at 197.
[5] Decision No. 16, at 41.

energy renaissance we aim to achieve our target of doubling the 2013 carload ahead of schedule. Our unique access to Canadian production regions, the trend toward unit train operation on network, and our strong destination franchise should make the continued growth in the fourth quarter and into 2015."[6] Most importantly, CN proclaimed that "[w]e have the network capacity, the locomotive capacity[[7]], the crews ***and the Chicago solution to meet the need of the crude industry.*** The outlook for frac sand is also very positive. We have new production facility ramping up and we have new receiving facility as well ramping up. We had guidance to get to $300 million in 2015 for frac sand which we now expect to achieve this year."[8] Because a substantial percentage of the foregoing movements are traveling to CN's strong destination franchise located along the Gulf Coast and points in the Midwest (and will continue to do so in the future), such movements are unquestionably facilitated by CN's acquisition of the EJ&E line running through the center of Barrington. CN's "Crude-By-Rail Franchise" (as detailed in CN's 2013 Fact Book) is reflected by the map on the following page.

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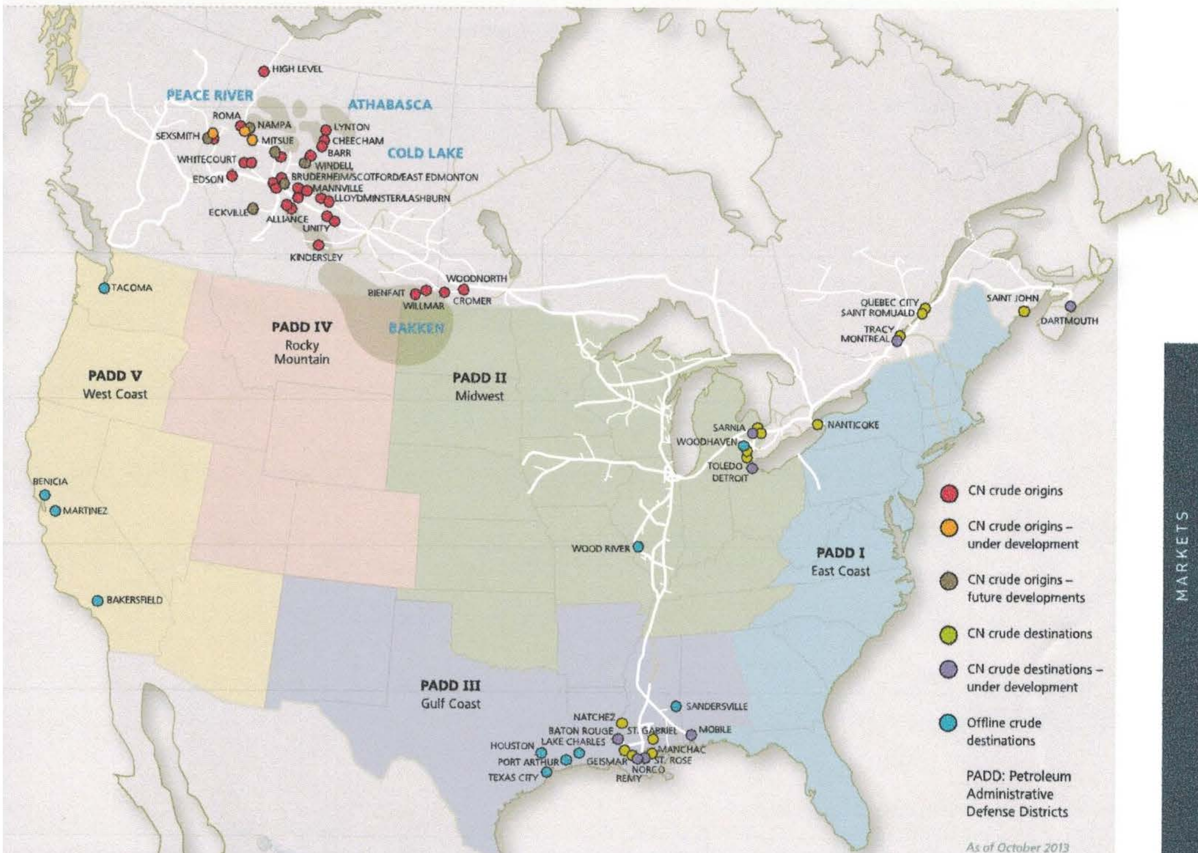
[6] Earnings Call Transcript at 5.

[7] As also noted at page 3 of the Earnings Call Transcript, "We continue to add locomotives to handle growth and we will be receiving 40 more before the year end. We have also placed orders in 2015 and '16 to ensure we are well positioned for continued growth as well as the change to the tier four locomotives next year. We have stress tested our car fleet and have added cars strategically to handle the growth."

[8] Id. (emphasis added).

PETROLEUM AND CHEMICALS

CN'S CRUDE-BY-RAIL FRANCHISE



MARKETS

2013 CN INVESTOR FACT BOOK

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As the foregoing map vividly demonstrates, CN's network provides unique access to Canadian crude oil production regions in Western Canada.[9] Moreover, it also provides efficient access to refineries on the Gulf Coast and elsewhere that are reached by passing over the EJ&E line and avoiding Chicago's notorious rail gridlock.

The enormous surge in the movement by rail of crude oil and ethanol, along with the anticipated expanded exploitation of long-term oil sands plays in Western Canada, has materially changed the rail environment and rendered CN's pre-transaction market projections and general operating assumptions obsolete. Because the crude-by-rail phenomenon was not anticipated in 2007, it necessarily follows that CN's projections could not have allowed the Board to weigh the profound long-term impact of the energy renaissance on Barrington.

The impact of the unforeseen crude-by-rail phenomenon did not surface until well after CN commenced operations over the EJ&E Line through Barrington. As such, it constitutes a substantially changed circumstance that the Board could not have considered in 2008. As CN has recently publicly acknowledged, the newly acquired ability to operate over the EJ&E Line and connect Western Canada with refineries on the Gulf Coast and in the Mid-west has greatly enhanced CN's "Crude-By-Rail Franchise" and resulted in a major shift in CN's operations around Chicago. If the Board's retention of oversight jurisdiction is to have any real, substantive meaning, the Board must reopen

[9] http://www.nationalpost.com/opinion/columnists/story.html?id=4b02fa05-4d2a-4f6b-b66c-730f0249e943.

and carefully weigh the previously unconsidered adverse impact on Barrington and the surrounding region of these new, but previously unanticipated developments. In any event, the Board has jurisdiction to reopen to consider the materially changed circumstances that are detailed hereinafter.

Because the tremendous volume of these newly developed rail movements was not anticipated by CN when it sought control of the EJ&E, they were not factored into any of the traffic studies prepared by Barrington, CN, or the Board and its NEPA review consultant, HDR. Barrington respectfully submits that these recent operating and market service developments require the Board to exercise its retained oversight authority to address the need for at least one grade separation in Barrington. Putting aside for the moment the fact that this new traffic largely consists of hazardous materials, when this unanticipated energy commodity traffic is added to the initial volume of traffic that had been projected by CN in its 2007 application, it is plainly evident that these additional volumes will escalate the adverse impact on the Village of Barrington. Given the Board's stated intention "to provide a fully effective mechanism for quickly identifying and addressing"[10] operational difficulties associated with transactions of this scope, it is essential that the Board now give proper consideration to this massive and recent surge of unanticipated freight movements and its impact on Barrington and the surrounding region.

[10] 12/24/08 Approval Decision at page 26.

In 2010, even before the impact of the energy renaissance had surfaced, the United States Department of Transportation ("USDOT") recognized that increased freight traffic resulting from CN's acquisition of the EJ&E line had established the need for a grade separation at the intersection of U.S. Highway 14 and the EJ&E Line. Based on the adverse impact to Barrington and the region from the increasing and additional anticipated delays on U.S. Highway 14, which is a key Strategic Regional Arterial, USDOT awarded a TIGER II grant of $2.8 million to Barrington to undertake the preliminary engineering studies for a grade separation at the U.S. Highway 14 crossing. That was followed by a local match of $700,000 by the Illinois Department of Transportation ("IDOT"). In addition, as explained by in the Verified Statement of Barrington Village President Karen Darch that accompanies this pleading, "a total of $14,012,767 has been committed to Phases II and III of the project by regional stakeholder municipalities through the regionally allocated federally funded Surface Transportation Program ("STP") and by IDOT."[11] This has left a funding shortfall of approximately $47 million for a project that was not required before CN acquired the EJ&E line. Because the need for the grade separation is solely attributable to CN's increased traffic, and because there is reason to believe that CN will likely double track the line through Barrington in order to handle the continuing growth of traffic over the EJ&E, the Board is

[11] V.S. Darch, at 19.

respectfully requested to order CN to fund the remaining cost of $47 million, an amount which is equal to 79% of the total project cost.

CN Management Has Publicly Acknowledged The Extreme Importance Of The Energy Renaissance And Its Relationship To CN's Acquisition Of The EJ&E Line Around Chicago.

In her Verified Statement, Mayor Darch,[12] has highlighted remarks made by top CN management during CN's Third Quarter 2014 Financial Results Conference Call held October 21, 2014.[13] As she has explained, during that call, which was hosted by CN for members of the financial community:

> CN noted that it has "concentrated on the Edmonton to Chicago corridor with investments on branch lines, double track and yard capacity."* CN also noted that it "doubled our crude carload from last year."* It also commented that "[f]rom the energy renaissance we aim to achieve our target of doubling the 2013 carload ahead of schedule. Our unique access to Canadian production regions, the trend toward unit train operation on network, and our strong destination franchise should make the continued growth in the fourth quarter and into 2015."* CN also commented that "people like our destination franchise, they also very much like super Chicago solution."* I also note that CN proclaimed "[t]he ability to connect our own networks in these webs around Chicago is just huge, it's a great asset." (* Footnote references omitted).

As Mayor Darch has also observed, CN accurately predicted that:

> It has the scope to double its crude-by-rail business in 2013. CN crude-by-rail shipments are characterized by a longer average length of haul, more than double the average for all CN traffic, providing greater revenue potential. As pipeline construction is delayed, oil production continues to increase

[12] While her official title is "Village President," the title "Mayor" is also appropriate.

[13] A copy of the transcript of the CN analyst call is attached to the Verified Statement of Mayor Darch.

> and major oil players continue to invest heavily in rail infrastructure, crude-by-rail shipments will remain a viable alternative shipping solution.[14]
>
> Moreover, during the analyst call, CN's top management reemphasized its belief that "the acid test of crude by rail for an oil producer an[d] oil buyer has passed. We made that test more than one time this year and last year. So the market sees the value of that transportation mode."[15] In other words, even if additional pipelines are built[16], CN will continue to play a major role in the movement of crude oil and oil sands from Western Canada.[17] In fact, CN executives on the analyst conference call discussed the permanency of energy commodities being shipped by rail. CN's Executive Vice President and Chief Marketing Officer Jean-Jacques Ruest stated: It's an industry that works along the line with the pipeline industry. People commit to it, they commit to investment.... you hear Executive or CEO of a larger oil producer or oil buyer who talks about crude by rail being a permanent part of their portfolio, how they get product to markets.[18]

President and Chief Executive Officer Claude Mongeau further emphasized that crude producers have been making substantial capital investments in the infrastructure to ship product by rail:

> The underwriting tends to be with the loading facility clients and we furnish line haul and locomotives and resources to commit to markets. We certainly provide mass market access .... All of these supply chains are backed by very significant

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[14] http://www.cn.ca/-/media/Files/Investors/Investor-Factbook-current/Investor-factbook-2013-en.pdf, at p. 79.

[15] Earnings Call Transcript at 20.

[16] Barrington is aware that the fate of the Keystone XL Pipeline is still an unknown.

[17] In an article entitled *Keystone Pipe Vote Tackles Questions History Answered,* dated November 17, 2014, Bloomberg reporters Jim Snyder and Jeremy van Loon reported that energy analysts have stated that the need for Keystone XL has been effectively eliminated by crude-by-rail. http://www.bloomberg.com/news/2014-11-17/keystone-pipe-vote-tackles-questions-history-answered.html.

[18] Earnings Call Transcript at p. 22.

> investments on the part of those who are (setting) them up.[19] They got the commitments, the capitals in the ground (and) they will move what they produce.[20]

CN's confidence is borne out by its existing network, in which the EJ&E Line through Barrington is a key component because it allows CN to avoid having to move through the heavily congested Chicago rail system. The fact that this line can bypass the Chicago congestion has been a heavily touted marketing differentiator for CN. Jim Vena, Executive Vice President and Chief Operating Officer of CN underscored the importance of the EJ&E in this market opportunity during the analyst call, "[w]e have our length to haul and further and the same thing with Winnipeg coming south, we have with the frac sand business that's growing. So when you put in the mix that you got 25% of our business touches Chicago."[21] And as Jean-Jacques Ruest added:

> when we do it, there is a lot of interline business, crude which is also a lot of interline - intermodal obviously because you want to go south maybe Memphis or east to Detroit, lumber long haul. If you any kind of these different industries they try to go Chicago I think the EG&E (sic) Ring Road is lot more attractive for you than a mega merger root canal.[22]

As shown by the map of "CN's Crude-By-Rail Franchise," CN's network provides an unrestricted gateway between Western Canada and Gulf Coast and Midwest refineries. Given the further projection that the Province of Alberta

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[19] Id.
[20] Id. at p. 20
[21] Earnings call at page 26.
[22] Id.

resides on top of oil sands that hold 167 billion barrels of these reserves,[23] it is no wonder that CN management enthusiastically touts the ability to connect its network around Chicago to access energy markets across North America. No other North American Class I railroad has that capability.

This type of new evidence that details changed circumstances impacting freight traffic volumes over the EJ&E Line fits squarely within the Board's oversight jurisdiction. Simply put, no one anticipated the unprecedented surge in movements of crude oil by railroad that has occurred in the past few years. As the Pipeline and Hazardous Materials Safety Administration recently observed, "[a]ccording to the rail industry, in 2009 there were some 10,800 carloads of crude oil originations transported by Class I railroads, and in 2013, there were over 400,000 carloads of crude oil originations by Class I railroads, or 37 times as many in the U.S."[24]

Akin to the Bakken crude situation circa 2008, the transport of oil sands from Alberta is still in its infancy. Mayor Darch notes that the following has been reported:

> At the beginning of 2013, the rail loading capacity originating in Western Canada was only about 180,000 b/d. As a result of a number of new facilities and minor expansions coming into service throughout 2013, the capacity has now increased to 300,000 b/d. By the end of 2015, western Canada uploading capacity for crude oil is

[23] Canadian Association of Petroleum Producers, Crude Oil Forecast, Markets and Transportation, June 2014.

[24] PHMSA, Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains, 79 Fed. Reg. 45016, 45019, August 1, 2014.

> expected to exceed 1.0 million b/d. Several proposed facilities can be further expanded beyond the initial stated capacity so it is conceivable that rail capacity could be expandable to 1.4 million b/d.[25]

The increase in CN's energy commodity oil movements is continuing. As CN noted during the October 21 earnings conference call, during the third quarter of 2014, it doubled its crude carload from 2013 with Canadian heavy crude accounting for 60% of its petroleum and chemical movements. *See* Earnings Call Transcript at p. 4. Furthermore, it is "ramping up two unit train loading facilities operated by mid-stream and pipeline companies which are backed up by long-term commitment from large oil companies."[26] It also advised the financial analysts on the call that "[p]ropane, gas and diesel were also up nicely and have ongoing potentials."[27]

AAR has also noted that similar increases have been realized in the movement of industrial sand, which would include sand used in hydraulic fracturing. Between 2009 and 2013, carloads of industrial sand increased from just over 112,000 carloads to approximately 375,000 carloads. As was confirmed during the recent earnings conference call, CN now has "a very strong origination franchise that we now ship in both frac sand and energy markets in general with an equally if not stronger destination franchise."[28] In addition, it was noted that CN's ability to "get in and out of Chicago very

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[25] Canadian Association of Petroleum Producers, Crude Oil Forecast, Markets and Transportation, June 2014.

[26] Earnings Call Transcript at p. 4.

[27] Id. at p. 4.

[28] Earnings Call Transcript at 18.

fluidly" (*i.e.,* over the EJ&E Line) is playing a major role in attracting this new business to its network of tracks that connect the Gulf Coast and Midwest refineries with the crude oil production areas in Alberta.[29]

As Mayor Darch has also noted, CN's 2013 Fact Book highlights the fact that CN's existing network links Alberta and Saskatchewan oilfields to the refineries in the United States that handle heavy crude. The Board's attention is invited to page 78 of the 2013 Fact Book:

> The Company also provides tidewater access to U.S. PADD I (Petroleum Administrative Defense District I – East Coast), U.S. PADD III (Gulf Coast), Europe and India. CN's crude-by-rail service provides single-line, high-velocity turnaround from Alberta and Saskatchewan oilfields to PADD III refineries – with network capacity available right away. CN can directly access PADD II and PADD V regions via other railroads. The Company is also a key link in the petroleum industry's condensate supply chain. CN currently moves significant volumes of condensate from the U.S. (Gulf Coast, Pennsylvania and Kansas) to the Canadian oil sands. While condensate will continue to be needed, in some cases, CN sees an opportunity to ship crude by rail to market and use the same railcars to bring condensate back to the oil sands area.

CN officials have politely declined to provide Barrington with information that reveals either the extent of current crude oil movements or future projected volumes of this new traffic that will move through Barrington. However, as Mayor Darch has noted, Barrington officials "were told that 8% of the traffic that moves through Barrington consists of hazardous materials, as compared with CN's national line average of only 4%."[30] Given those numbers,

[29] Id.
[30] V.S. Darch at 27.

it is clear that energy commodity traffic – both current and future -- will unquestionably adversely impact Barrington in ways not contemplated by the Board in 2008. Given the fact that CN's top management has repeatedly highlighted the newly acquired ability to bypass Chicago while linking Western Canada with CN's destination franchise, there is no avoiding the conclusion that the EJ&E Line will be increasingly used to route crude oil, condensate, fracing sand and oil sands between Western Canada and the various refineries reflected on CN's "*Crude-By-Rail Franchise*" map.

Given the rapid increase in this unanticipated traffic, it is impossible to guestimate, much less pinpoint with any accuracy, the future number or length of additional CN freight trains engaged in the movement of petroleum and petroleum products that will pass through Barrington on a daily basis. However, CN's Monthly Operational Report for September 2014 delays (which only reflects trains that blocked crossings for more than 10 minutes) shows that the average length of the 29 trains on that list that are known to have passed through Barrington in September was 8,568 feet. That can be compared with the average train length in 2011 of only 5,800.[31] Of the 29 trains, 1 was over 10,000 feet long, 15 were in excess of 9,000 feet, 6 were over 8,000 feet, and 2 were over 7,000 feet long. Even if the target number of daily trains may not yet have reached the figure originally projected by CN, the

[31] The 5,800 figure was based on actual counts of all cars that passed through Barrington during the May 12 through June 15, 2011 period when Barrington consultant Civiltech was preparing its 2011 traffic analysis.

number of carloads has certainly exceeded the number of projected carloads by a wide margin.

Furthermore, it is reasonable to assume that the recent surge of movements of crude oil is just the tip of the iceberg given that the expanding bitumen[32] and condensate markets are still in the initial stage of development. Even if additional pipeline capacity eventually serves the Alberta oil sands market, rail will offer some distinct advantages:

> One advantage is known as "dispatchability". In plain English, this means rail has the flexibility to ship crude to the highest-profit destination, wherever that may be. Right now, that's the Gulf Coast. But in the future, that may change. Second, you can ship small amounts more economically. Finally, shipping by rail has a lower capital commitment. This makes crude-by-rail especially valuable to smaller producers.[33]

Other Major Traffic Flows That Were Initially Discounted As Being Speculative Should Be Considered When Assessing The Adverse Impacts On Barrington And The Surrounding Region.

The energy renaissance is not the only "new" major flow of traffic that was not taken into account by Mr. Stuebner. Another example of new traffic that Stuebner ignored involves the wave of intermodal traffic that began in October 2007, when Cosco Lines began shipping to the recently opened intermodal container shipping terminal at the Port of Prince Rupert ("PPR").

[32] The terminology of "bitumen", "oil sands", "tar sands", and "heavy crude" can all be used interchangeably

[33] https://www.fool.ca/2014/11/06/now-that-pipeline-capacity-could-skyrocket-should-you-sell-the-rails/

Although Barrington (at an early stage of the proceeding) requested consideration be given to the impact of the opening of the PPR's Fairview Terminal, the new movements were viewed as too speculative at that time.

However, as Mayor Darch has noted, in its 2013 Fact Book, CN touts the fact that "West Coast volumes on CN have increased 65 per cent over three years to 2012, well beyond the growth of the economy."[34] In addition, CN acknowledged that "[f]our years ago, about 25 per cent of CN international containers from the West Coast were destined for the U.S. Today that number exceeds 40 per cent."[35] Because much of the intermodal traffic is headed to CN's major intermodal terminal in Joliet (which is located to the south of Barrington on the EJ&E) or Memphis, that traffic can no longer be viewed as speculative. Thus, it is imperative that the Board for the first time carefully consider its impact.

As CN's freight trains increase in number and in length, *additional daily vehicular delays are inevitable*![36] The increased delays will not only adversely impact Barrington, but the impact will be felt throughout the surrounding region. The impact is based on the fact that two of the primary roadways

[34] 2013 CN Fact Book at 15.

[35] 2013 CN Fact Book at 48.

[36] The 98 hours of delay at U.S. Highway 14 have been accepted by the Board and CN as accurate during the oversight period for this transaction. As noted above, the average length of trains in mid-2011 was only 5,800 feet.

located in the Village of Barrington, namely U.S. Highway 14 and IL Route 59 (Hough Street), are designated as Strategic Regional Arterials ("SRA").[37]

The United States Department Of Transportation's TIGER II Grant, Which Responded To Evidence Reflecting The Adverse Impact On The Movement Of Vehicular Traffic On U.S. Highway 14 Supports Reopening To Consider The Regional And Local Impact Of The New Movements And The Resultant Increased Need For Grade Separation Mitigation At The U.S. Highway 14 Crossing.

On October 15, 2010, after the Board granted CN authority to acquire the EJ&E Line, but well before the impact of CN's crude-by-rail operations and the rapid increase in the number and lengths of trains and carloads had been realized, Barrington was awarded a $2.8 million TIGER II grant to undertake the preliminary engineering studies for a grade separation at the U.S. Highway14 crossing. The grant application, which was based on and focused on the adverse impact on the movement of vehicular traffic on U.S. Highway 14 (both in and through Barrington) was a direct response to CN's acquisition of the EJ&E Line. As Mayor Darch has explained:

> The acute need for a grade separation at the U.S. Highway 14 crossing is solely attributable to the significant increase in the number of freight trains that is unfolding following CN's acquisition of the EJ&E line. Without the increase in the freight traffic, Barrington would not have sought the TIGER II grant in 2010. Now that the initial projected need will be compounded by the dramatic increase of unanticipated movements of energy-related commodities, a grade separation in Barrington is even more crucial to the region because the volumes of freight related to that market

[37] In the case of U.S. Highway 34 in Aurora and U.S. Highway 30 in Lynwood, the Board properly took the SRA designation into account in awarding grade-separation relief at the crossings where those highways intersect with the EJ&E Line. However, similar consideration was denied for the U.S. Highway 14 at-grade crossing in Barrington.

> clearly portend more and longer trains, and even a double-tracking of the EJ&E.[38]

It must be stressed that Barrington's TIGER II application, similar to the 2007 CN control application for the EJ&E, did not foresee the recent North American energy renaissance developments. Therefore, Barrington relied on the same freight traffic projections that were considered by the Board in 2008 to support its 2010 TIGER II application. It necessarily follows that the TIGER II grant award reflected only the impact of CN's 2007 projections of increased traffic.

In her Verified Statement, Darch notes that Barrington's application "explained that the traffic impacts created by CN's expanded operations on the EJ&E are a major negative factor in terms of commuter efficiencies, public safety, environmental sustainability, economic viability, and livability of the northwest region of the greater Chicagoland metro area."[39] In addition, she has set forth the detailed list of reasons why Barrington requested grade separation for U.S. Highway 14.[40] It is of prime importance that even without consideration of the added delays that will be attributable to the new energy-related movements, Barrington's Cost/Benefit analysis showed that the U.S. Route 14 grade separation project "over a period of half the life cycle of the

[38] V.S. Darch at 13.
[39] V.S. Darch at 10.
[40] Id. at 16

improvement would mitigate delay costs of nearly $143 million."[41] As Mayor Darch has explained:

> The financial magnitude of the harm caused by blockages of the U.S. Highway 14 crossing is reflected in the required Cost/Benefit Analysis that was presented to USDOT in Barrington's TIGER II application. The Cost/Benefit Analysis supporting the TIGER II grant reflects total value of benefits over the lifetime of the grade separation project at the U.S. Highway 14 crossing in the amount of $353,710,754. That total reflects the total value of reduction in delays of $169,656,261; the total value of accidents and injuries avoided of $176,249,210; and total value of fuel saved in the amount of $7,805,282. That benefit far exceeds the total estimated cost of $66,607,787 for the grade separation project.[42]

As she has also observed:

> As is very obvious from the transcript of CN's Earnings Call, CN's ability to avoid rail gridlock in downtown Chicago is allowing CN to reap significant financial and operational benefits. Those benefits will continue to accrue to CN in perpetuity. I am confident that if the STB were required to perform a cost/benefit analysis similar to that which Barrington prepared for USDOT, it would become clear that the cumulative benefit to the region of a grade separation at U.S. Highway 14 in Barrington would far outweigh the relatively minimal and short-term costs to CN of contributing funding for its construction.[43]

In order to fully understand the significance of the USDOT's TIGER II grant, the Board should note that the program is intended to "fund projects that have a significant impact on the Nation, a region or a metropolitan area." As Mayor Darch has explained, Barrington's application focused on the fact that the Board's approval of CN's application without any grade-separation at

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[41] Id. at 16.
[42] Id. at 25.
[43] Id.

the U.S. Highway 14 crossing had significantly disrupted the region's Strategic Regional Arterial (SRA) system. That system, which is intended to supplement the existing and proposed expressway facilities by accommodating a significant portion of long-distance, high-volume automobile and commercial vehicle traffic in the region, was developed in the early 1990's by the Illinois Department of Transportation, in cooperation with the Illinois Tollway, the predecessor agencies to the Chicago Metropolitan Agency for Planning ("CMAP"), the National Infrastructure Protection Center ("NIPC"), and the Regional Transportation Authority ("RTA").

It is respectfully submitted that USDOT's $2.8 million TIGER II planning grant for Phase I engineering/environmental review (which was the largest of the TIGER II planning grants in that round), reflects the federal government's determination that a grade separation at the U.S. Highway 14 crossing is essential if the objectives of the SRA system are to be achieved, i.e. insuring that the mobility of vehicular traffic will not be adversely impacted by frequent and random rail freight-induced gridlock. The fact that almost three times the community's population travels through the Village on U.S. Highway 14 on a daily basis clearly reflects a regional impact and not merely a local impact.

The significance of U.S. Highway 14 in terms of regional mobility has also been recognized by IDOT which, as Mayor Darch has noted, "provided the local match of $700,000. The Phase I work has now been completed and the project design has been approved by all parties in the 'Project Study Group' after having received substantial input by local stakeholder residents and businesses under the leadership of the 'Community Advisory Group'.[44] Furthermore, a total of $14,012,767 has been committed to Phases II and III of the project by regional stakeholder municipalities through the regionally allocated federally funded Surface Transportation Program ("STP") and by IDOT."[45]

As Mayor Darch has also noted:

> During the TIGER-funded environmental review process for the grade separation, Patrick Jones, CN's Manager of Public Works, commented, in an email dated April 5, 2013, that "CN confirmed that a second track in this area would be consistent with other double-tracking projects completed and planned since CN's takeover of the former EJE." The likelihood of double-tracking the EJ&E in Barrington was reiterated again in February 5, 2014 when CN, which participated in consultations with FHWA, USEPA, the United States Army Corps of Engineers, IDOT and Barrington, requested in a second project-related email that the bridge abutments that would carry CN's tracks over the lowered U.S. Highway 14 be wide enough to accommodate two tracks. As these communications demonstrate, CN is well aware that the current single track through Barrington is insufficient to handle both the traffic projected in its 2007 Application and the wholly unanticipated energy commodities traffic that has begun developing on its network during the past few years.[46]

As Mayor Darch has also reasoned:

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[44] The "Project Study Group" (PSG) consisted of representatives from Barrington, CN, IDOT, the various involved state and federal regulatory agencies, as well as the project consultant. Unlike the closed-door Board NEPA review of this transaction, the PSG – as a group -- had primary responsibility for the project development process, and provided technical oversight and expertise in key areas, including study process, agency procedures and standards, and technical approaches.

[45] V.S. Darch at 19.

[46] V.S. Darch at 20.

> Although CN never mentioned the possibility of double tracking the segment of the EJ&E Line that passes through Barrington in its 2007 application, it is my reasoned conclusion that it is only a matter of time before CN will double track through Barrington. That conclusion is based on the CN communications generated in PHASE I of the project planning, as well as the post-2010 volume of new energy-related traffic on CN's network in Western Canada that is in the process of being developed and that will increasingly move over the EJ&E Line to CN's strong destination assets that serve feature refineries on the Gulf Coast and in the Midwest.[47]

Barrington's assumption concerning the necessity to double track the EJ&E to meet the capacity needs of moving the massive surge in energy commodities is underscored by the Board's own rail line volumes analysis done during the 2008 NEPA review process that stated:

> SEA therefore concluded that the Applicants' Operating Plan would consume nearly all of the main line capacity on the EJ&E rail line, after Applicants' constructions are completed. Accordingly, the volume of through trains on the EJ&E rail line would likely not exceed the train volume proposed by the Applicants. In addition, SEA concluded that the EJ&E rail line would be unlikely to have the practical capacity to accommodate additional freight or passenger trains of other railroads, and the Applicants' Operating Plan could have insufficient capacity to allow for non-interference with the existing trains of other railroads that cross the EJ&E rail line without incurring delays to Applicants' trains.
>
> … [U]nder the Proposed Action, trains would experience major delays at several locations along the EJ&E rail line. The addition of more trains would serve only to increase those delays and further reduce the efficiency of the system. SEA concluded from this analysis that under the Applicants' Operating Plan, the EJ&E rail line would be operated at or very near to capacity, and that there is little, if any, room for growth in the anticipated daily train volumes."[48]

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[47] V.S. Darch at 20.
[48] DEIS Appendix B, Attachment B4 Page 13 of 28.

Because CN's application to acquire the EJ&E did not mention double tracking through Barrington, and because no further authority from the Board would be required in order for CN to double track, Barrington respectfully requests that the Board immediately deal with this inevitability of increased carload traffic by granting Barrington grade separation relief at U.S. Highway 14. Absent ordering this critical mitigation, Barrington will have no means of obtaining any significant contribution from CN to help cover the cost of a grade separation even though the need for a grade separation is wholly attributable to CN's increased rail traffic through Barrington – just as is the case in Aurora and Lynwood.

Consideration Of The Unanticipated Movement Of Energy-Related Commodities Demonstrates That The Total Absence Of Grade Crossing Separations At Any Of The Four Crossings Within The Village Has Adverse Regional Implications In Terms Of Life Safety.

The sheer volume of these unanticipated movements reflects only one aspect of the issue. In Barrington, where lengthy trains in excess of 9,000 feet in length block all four of the major roads that cross the EJ&E Line in simultaneous or rapidly successive fashion, the lack of a single grade separation can have life threatening, and even deadly, results. Thus, it is imperative from a public life safety standpoint that grade separation mitigation be granted for the U.S. Highway 14 crossing.

The basic life safety issue is highlighted by the fact that Advocate Good Shepherd Hospital, which is a Level II Trauma Center and the area's premier cardiovascular hospital, is located to the northwest of the EJ&E track just off of U.S. Highway 14 in Lake Barrington. In 2012, it was also accredited as a Primary Stroke Center by DNV Healthcare Inc.

As has been explained by Ms. Karen Lambert, who is the President of the hospital, the "chance of survival for a cardiac patient decreases by 10% for every minute of delay in receiving the care that only can be accessed in the hospital setting. Due to this collaboration with our EMS partners, we consistently achieve times significantly better than the national 90 minute standard for patients coming into the Emergency Department and requiring cardiac intervention."[49] As she has also noted, "stroke accounts for more than one out of every 15 deaths in the United States. Time-to-treatment is no less critical for the stroke patient than the cardiac case. Like the Cardiac Alert team, Good Shepherd's Stroke Alert program is based on clinical best practice guidelines to manage and optimize stroke patient care to save vital brain function."[50]

In the final analysis, the U.S. Highway 14 crossing is key. As Ms. Lambert has explained, "[b]ecause elapsed time is a critical factor in the success of emergency response to a medical crisis, I fully understand the need to build a grade separation at U.S. Highway 14 where it meets the EJ&E rail line – most especially because that is the most direct route to the hospital from downtown Barrington and it doesn't cross the UP Metra commuter line."[51]

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[49] V.S. Lambert at p. 2 (Attachment E to V.S. Darch).
[50] Id.
[51] Id. at 3.

As Ms. Lambert has also confirmed, Good Shepherd's emergency department is literally a lifeline in the region's health care coverage. Its service area encompasses many communities on the "wrong side" of the EJ&E, most immediately, "all or parts of the Villages of Barrington, Barrington Hills, Deer Park, South Barrington, and Inverness."[52] People in these areas are on the "wrong side" of the EJ&E line in terms of having full access to the hospital when crossings are blocked by stalled and/or moving trains. Only a grade separation will provide the necessary relief.

That an incident involving a stopped train can simultaneously block all four of the crossings in Barrington for an extended period of time is not a hypothetical situation. It has already occurred in the aftermath of CN's takeover.

Finally, it must be stressed that Good Shepherd is a regional hospital and draws patients from well beyond the Village of Barrington. As Ms. Lambert has also explained, "Good Shepherd was built, and has experienced rapid expansion, to serve the hospital needs of the people" living in the Barrington and the other communities located in the greater northwest Chicagoland region.[53]

A Serious Derailment Within The Village Boundaries Would Have Catastrophic Regional Consequences And Greatly Hinder The Ability Of First Responders To Deal With The Situation In The Absence Of At Least One Grade-Separated Crossing.

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[52] Id.
[53] Id.

During the past several years, Barrington and the TRAC Coalition have played an active role in the ongoing rulemaking proceeding involving the DOT-111 tank cars that have long been recognized to be structurally deficient and prone to rupture when involved in an accident or derailment. Unfortunately, these tank cars continue to be the primary workhorse for the transportation of highly flammable commodities, such as ethanol and crude oil. While Barrington is mindful that the Pipeline and Hazardous Materials Safety Administration ("PHMSA") has proposed a rule that would eventually prohibit the use of DOT-111 tank cars in freight trains containing 20 or more tank cars transporting crude oil, and other flammable hazardous materials, it would not prohibit their usage in the transport of oil sands. Barrington is also aware that many of CN freight trains generally have fewer than 20 tank cars and that CN boasted in its 2013 Fact Book that its crude "shippers can move one, two, 20, or 100 or more rail cars depending on their needs" on its tri-coastal network. Furthermore, Barrington is well aware that some of the most catastrophic events occurred at relatively low speeds when a small number of tank cars derailed due to washouts, other track-related defects, cracked wheels, or other rolling stock defects.

As Mayor Darch has explained, during the past five years, multiple CN trains have been involved in incidents in which tank car derailments resulted in multiple releases of highly flammable commodities, including ethanol and crude oil, and subsequent fires that, in at least one instance, burned for several days.[54] Included in these accidents was a fatal ethanol unit train derailment outside of Rockford, IL that killed one woman and resulted in a $36 million civil liability settlement by CN. If such an incident were to occur within Barrington's boundaries, the potential damages would be greatly intensified if there is no possibility to get from one side of a burning train to the other side because of the absence of any grade-separated crossing in the Village.

Furthermore, the regional consequences would be magnified as UP commuter operations would be temporarily halted and commuters would be unable to use U.S. Highway 14, which is one of the major SRAs over which commuters move between Chicago and the communities that surround Barrington. In short, the unanticipated new volumes of hazmat traffic that were never taken into consideration by CN, the Board, and the parties prior to the release of the Board's December 24, 2008 decision requires the Board to order grade separation mitigation at the U.S. Highway 14 crossing in Barrington.

When The Board Considers The New Evidence, It Must Also Consider The Implications Of Recent Conclusions And Findings Of The Pipeline And Hazardous Materials Safety Administration Pertaining To The Movement Of Crude Oil And Other Flammable Hazmat By Rail.

The Board's attention is invited to the previously referenced Notice of Proposed Rulemaking before the Pipeline and Hazardous Materials Safety Administration (PHMSA), Docket No. PHMSA-2012-0082 (HM-251), Hazardous

[54] V.S. Darch at 29.

Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains. Based on train accidents involving crude oil shipment between 2000-2013, PHMSA, in its Draft Regulatory Impact Analysis ("RIA"), dated July 2014, has concluded that because of the projected continued growth of domestic crude oil production, and the growing number of train accidents involving crude oil, "the potential for a train accident involving crude oil has increased, which has raised the likelihood of a catastrophic train accident that would cause substantial damage to life, property, and the environment."[55]

As PHMSA also explained, due to recent changes in the transportation of crude oil by train, "PHMSA and FRA have concluded that the historical train accident record alone cannot determine the probability of a catastrophic event."[56] Those recent changes reflect the enormous increase in rail shipments of crude oil, as well as the shift to the use of unit trains for transporting these dangerous commodities. PHMSA explicitly recognized that a catastrophic incident could be triggered if as few as 5 tank cars were to split open following a derailment.[57] Moreover, PHMSA's analysis of 46 crude/ethanol derailment accidents since 2006 indicates that in 20 of those accidents, the breach of a single tank car resulted in a spill of hazmat with the potential to endanger the surrounding public. Moreover, in nine of the thirteen incidents highlighted in

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[55] RIA at 8.
[56] RIA at 20.
[57] PHMSA, Draft Regulatory Impact Analysis, July 2014 at 192.

Table 1: Major Crude Oil/Ethanol Train Accidents in the U.S. (2006-2014) of PHMSA's NPRM, fewer than 20 carloads of hazmat were breached.[58]

Barrington respectfully submits that PHMSA's recent findings trump SEA's conclusions that "hazardous material releases have historically been, and are expected to continue to be, extremely rare."[59] The same is true regarding SEA's analysis regarding the predicted frequency of a release of hazardous materials.[60] Of course, SEA never considered the possibility of crude oil being extensively transported over the EJ&E rail line. Instead, it relied on CN's general assumptions that the same type of traffic would be transported if the Transaction was approved as was being transported in 2006.[61]

The possibility of another explosive situation can no longer be summarily dismissed in light of the fact that PHMSA identified several recent incidents in which CN derailments involving hazmat releases caused fires that have burned for several days before they were extinguished. The reality of the situation is that CN's EJ&E rail line is located in the heart of Barrington, which is very similar to the situation in Lac Mégantic, where the derailment of a unit train of

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[58] RIA at 19.

[59] FEIS, CH. 2.7, at 2-67. SEA's conclusion was cited with approval by the Board at p. 50 of its December 24, 2008 Decision.

[60] Id.

[61] FEIS, CH. 2.7.1 at 2-67: "SEA used daily carload-miles (a carload-mile is one rail car carried one mile) to measure the change in volume per commodity group transported. SEA believes that since under both the No-Action and the Proposed Action Alternatives most of the same commodity groups would be carried on the EJ&E rail line, emergency response providers would face the same types of issues in dealing with incidents that they would face under the No-Action Alternative."

tank cars transporting highly explosive crude oil resulted in over a billion dollars of damages and the death of 47 people.

It is readily acknowledged that the Lac Mégantic tragedy reflects a perfect storm. However, there is no avoiding the conclusion that if a lengthy CN unit or manifest train transporting crude oil, ethanol, condensate or other flammable liquid hazmat were to derail while passing through Barrington, it could trigger a catastrophic incident that could require evacuation of an area within a ½ mile of the derailment zone as called for under hazmat response protocols. As Mayor Darch has explained:

> I have attached a map (Attachment I) that shows Barrington's potential evacuation zone should such an order need to be carried out if a CN flammable hazmat train derailed in the Village. It shows the enormity of the task Barrington would be facing. Potentially, we would need to evacuate up to 2099 business or residential parcels within that zone, including four schools, the Barrington Library, Village Hall, the post office, our main Public Safety Building that headquarters our police, fire and ambulance services, the Metra commuter train station, three senior living and/or nursing care facilities, one hospice, most of our commercial downtown area, six churches, and eight public parks and/or recreational facilities. Making matters worse, located within that evacuation zone are two electrical substations, as well as the Village's water treatment plant and three water facilities. Such an evacuation would be a staggering challenge for the Village with no grade separation – especially when speed of evacuation can mean the difference between life and death.[62]

Of course, given PHMSA's explicit recognition that "a *catastrophic* incident could be triggered if as few as 5 tank cars were to split open following

[62] V.S. Darch at 31.

a derailment,"[63] it is crystal clear that an entire train need not derail in order to cause extensive damage. Moreover, if the derailment were to release highly flammable materials that burn for several days, as has been the case in recent incidents involving CN, the lack of a single grade separation could hamper the ability of emergency responders to evacuate the area, contain the fire in a timely manner, and clean-up in the immediate aftermath. In such an instance, the damage inflicted on Barrington and its residents could be irremediable.

Because The Need For The Grade Separation Results From And Is Inextricably Linked To The Continuing Increase In Rail Traffic Resulting From CN's Acquisition Of The EJ&E Line, The Board Should Order CN To Pay The Balance Of The Estimated Cost Of The Grade Separation At The U.S. Highway 14 Crossing.

The Board, for all the above stated reasons, is requested to reopen the proceeding and, following consideration of the new evidence, require CN to cover the balance of the estimated cost for a grade separation at the U.S. Highway 14 crossing. There is no denying that CN will ultimately reap hundreds of millions in operational saving from being able to use the EJ&E Line to avoid having to pass through Chicago. As CN itself emphasized during the recent Earnings Call:

> The ability to connect our own networks in these webs around Chicago is just huge, it's a great asset. We worked hard. It took us many years to negotiate, many years to get the approval, all the work to get it done in terms of integration and we're reaping the benefit of all this hard work in terms of resiliency and services. It's also a huge opportunity from an asset standpoint and efficiency

[63] PHMSA, Draft Regulatory Impact Analysis, July 2014 at 192 (emphasis added).

> standpoint. We don't have locomotives waiting on either side. We don't have re-crews, we are able to [deploy] our assets and address the issues elsewhere in in our network.[64]

Furthermore, as Mayor Darch has observed:[65]

> While CN will continue to benefit from its bargain in acquiring the EJ&E Line in 2009 for only $300 million with cash on hand instead of having to construct a prohibitively expensive bypass around Chicago, Barrington has no such upside to anticipate. Instead, on the eve of its 150th birthday, Barrington, which has spent the last decades investing in the preservation and economic vitality of its historic downtown, faces a wall of freight trains impeding access to its businesses, its commuter rail line, and the provision of emergency medical care and public safety protection. This will impact our local economic growth, our tax base, the Village's overall livability, and most importantly, the life safety of our residents. Neither Barrington nor the State of Illinois have -- for the foreseeable future -- the financial resources to construct this grade separation project in order to counter the harm that the region is (and will be) experiencing as a result of CN's expanded freight operations. It is only fair and equitable for the Board to finally require CN to pay the balance of the cost for constructing a grade separation at the U.S. Highway 14 crossing.[66]

In the final analysis, it is highly inequitable to require Barrington and/or the taxpayers of Illinois or the United States to pay the cost of a grade separation that would not be required were it not for the increased rail traffic that is being generated by CN. As the Board correctly reasoned in awarding grade-separation mitigation to Aurora and Lynwood, "this transaction would have a substantial adverse effect on vehicular traffic delays and, in some areas,

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[64] Earnings Call Transcript at 26.

[65] V.S. Darch at 34-5.

[66] See also Letter to Mayor Darch from John Fortmann, reproduced as Attachment G to V.S. Darch.

regional and local mobility and safety at grade crossings. Thus, applicants' share of the cost should be more than the traditional railroad share for grade-separation projects."[67] Given the fact that the new freight traffic (without consideration of its potential to cause catastrophic damages) will continue to increase traffic delays and, as USDOT has recognized in awarding the TIGER II grant, adversely impact regional and local mobility and safety, the Board should require CN to pay $47 million to complete the needed grade separation project.

Respectfully submitted,

Richard H. Streeter /s/

Richard H. Streeter
Counsel for the Village of Barrington, IL

Dated: November 26, 2014

[67] Decision No. 16 at 46.

Before the

SURFACE TRANSPORTATION BOARD

Finance Docket No. 35087 (Sub-No. 8)

CANADIAN NATIONAL RAILWAY COMPANY AND GRAND TRUNK CORPORATION – CONTROL – E J & E WEST COMPANY

VERIFIED STATEMENT OF KAREN DARCH IN SUPPORT OF PETITION SEEKING IMPOSITION OF ADDITIONAL MITIGATION PURSUANT TO THE BOARD'S OVERSIGHT JURISDICTION AND REOPENING BASED ON MATERIALLY CHANGED CIRCUMSTANCES PURSUANT TO THE BOARD'S GOVERNING REGULATIONS.

My name is Karen Darch. I am the Village President of Barrington, Illinois. My office is located in Barrington Village Hall at 200 South Hough Street, Barrington, IL 60010. I have served as Village President since 2005, after service as a Village Trustee beginning in 1995. I am a past President of the Northwest Municipal Conference; have chaired BACOG (Barrington Area Council of Governments); am also a past Chairperson of the Metropolitan Mayors Caucus, which is composed of the 272 municipalities in the greater Chicagoland area, including Chicago; and also currently serve as a Vice President of the Illinois Municipal League. In addition, I serve on the Policy & Advocacy Committee of the Transportation Infrastructure and Services Committee of the National League of Cities. Prior to my career in public service, I was in the private practice of law and I remain a licensed Illinois attorney.

In my capacity as Village President, I have been involved in all stages of the instant proceeding and have personal knowledge regarding the facts that are presented herein. Barrington was the first community to alert the region to the proposed CN acquisition in 2007, and in March 2008, I became the founding co-chair of TRAC (The Regional Answer to Canadian National) Coalition with Aurora Mayor Tom Weisner. I am currently taking a leadership position on behalf of TRAC in the ongoing rulemaking proceeding before the Pipeline and Hazardous Materials Safety Administration ("PHMSA"), in its Docket No. PHMSA-2012-0082 (HM-251), *Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains.* Finally, I have personal knowledge of Barrington's grant application filed with the United States Department of Transportation that resulted in a $2.8 million federal grant that was received in 2010 for a grade separation project at the EJ&E crossing on U.S. Highway 14 under the highly competitive Transportation Investment Generating Economic Recovery (TIGER II) program. As described on DOT's website, this program "provides a unique opportunity for the U.S. Department of Transportation to invest in road projects that promise to achieve critical national objectives."[1] Barrington was one of only 75

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[1] http://www.dot.gov/tiger/about

communities to receive a TIGER II grant in a USDOT process that resulted in nearly 1,000 applications for project funding.[2]

I have recently reviewed the Verified Statement of David A. Stuebner that was included in the CN application that was filed with the Board on October 30, 2007. In his Verified Statement, Mr. Stuebner explained that:

> I was asked by CN to estimate the volume of rail traffic likely to be gained by the integrated system after the full implementation of the proposed CN acquisition of EJ&EW (the "Transaction"). I understand that this information is required for purposes of CN's operating plan as well as for *the Board's assessment of the potential environmental impacts of the Transaction.*[3]

In assessing the anticipated traffic gains to be generated by the combined CN/EJ&E system, Mr. Stuebner outlined the following general assumptions:

- 2006 traffic data are the best general source of available information about likely traffic gains as a result of the Transaction.
- The environment of the railroad industry is that which existed on December 31, 2006, except for the direct effect of the Transaction on traffic, which I estimate as if the Transaction were fully implemented.[4]

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[2] http://www.dot.gov/briefing-room/secretary-lahood-announces-more-70-innovative-transportation-projects-competitively: "These are innovative, 21st century projects that will change the U.S. transportation landscape by strengthening the economy and creating jobs, reducing gridlock and providing safe, affordable and environmentally sustainable transportation choices," said Secretary LaHood. "Many of these projects could not have been funded without this program."

[3] V.S. Stuebner at 191-92 (emphasis added).

[4] Id. at 193.

Stuebner then offered the conclusion that "I do not anticipate any gains to CN/EJ&E of entirely new business in which neither CN nor EJ&E had any participation in 2006."[5] That sanguine conclusion (which CN maintained over the course of the Board's NEPA review)[6] and its underlying assumptions have been invalidated by the post-2008 energy-related market developments on CN's rail network that were *never considered* by the Board when it granted CN authority to acquire control of the EJ&E Line that passes through Barrington. Nor were these energy-related developments taken into consideration when the Board fashioned mitigation relief in 2008 for impacted communities that had not reached negotiated settlements with CN.

Based on my active participation in the PHMSA rulemaking proceeding and related matters, I am aware that there has been an enormous surge in the transportation of crude oil that began well *after* CN filed its control application for the EJ&E. CN's 2013 Fact Book describes the railroad's history in this market:

> What began as simple truck-to-rail manifest service is quickly evolving into pipeline-connected tank-to-rail unit-train service. Adoption of CN's crude-by-rail services is accelerating at a rapid pace. In 2012, the Company moved approximately 34,000 carloads of crude, up from just a few hundred in 2010.[7]

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[5] Id. at 197.

[6] April 23, 2008 STB Decision on Final Scope of Study for Docket 35087 at page 7.

[7] http://www.cn.ca/-/media/Files/Investors/Investor-Factbook-current/2013-CN-Investor-factbook.pdf at page 76.

In addition, the just-released 2014 CN Investors Fact Book Update reflects a phenomenal growth in crude carloads from 216 carloads in 2010 to 73,035 in 2013.[8] Because these movements developed post-2008, the traffic that Mr. Stuebner projected would be generated by CN's acquisition of the EJ&E *did not include any traffic volumes that can be tied to the enormous surge of crude oil* (and other energy-related commodities) that is already being transported by CN over its tri-coastal rail network. And as I shall discuss in detail, in the past month, CN has publicly disclosed that it anticipates continuing future growth in such volumes.[9]

Because the impact of this unanticipated new traffic has never been considered by the Board, I have instructed Barrington's counsel to request the Board to reopen this proceeding in order that the Board can consider – for the first time – the North American energy renaissance market's impact on Barrington and the surrounding region. In particular, Barrington is requesting the Board to order CN to pay for a portion of the cost of constructing a grade-crossing separation at the intersection of U.S. Highway 14 and the EJ&E Line that is commensurate with what the railroad has been ordered to pay for grade separation projects in Lynwood, IL and Aurora, IL. I am duly authorized to offer this Verified Statement in support of that request.

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[8] https://www.cn.ca/-/media/Files/Investors/Investor-Factbook-current/2014-IFB-Update.pdf at page 5.

[9] http://cn.ca/-/media/Files/Investors/Investor-Factbook-current/IFB-2013-Markets-en.pdf -- See page 38 to view CN's Petroleum and Chemicals crude-by-rail franchise map.

As President of the Village, I am acutely aware of the fiduciary responsibility I owe my residents when it comes to investing taxpayer dollars wisely. I have not asked counsel to petition the Board on the Village's behalf because I have nothing better to do with my time or our taxpayer dollars. I do so only because construction of a grade separation project at U.S. Highway 14 and the EJ&E is critical to the future vitality of the Village, as well as the mobility of the northwest suburban area in which Barrington is located. While it would have been lovely to experience the negligible impacts the Board envisioned in 2008 for Barrington, this has not been the case and will not be in the future given CN's growing trade and Barrington's rail/roadway crossings configuration. As a result, Barrington can only rely upon the Board to rectify a problem that was created when CN purchased the EJ&E rail line.

Given the reality that the three Board members now at the STB were not with the Board when the transaction was approved, I would like to provide some background. Barrington was incorporated in 1865 and serves as the central hub community for the Villages of Lake Barrington, North Barrington, South Barrington, Deer Park, Barrington Hills and Tower Lakes. As a result, what happens in the Village of Barrington in terms of vehicular congestion has repercussions throughout the greater Barrington region and beyond. In particular, when the crossing over the EJ&E Line at U.S. Highway 14 is blocked, that blockage not only affects the traffic in Barrington, it impacts all the other communities in the region.

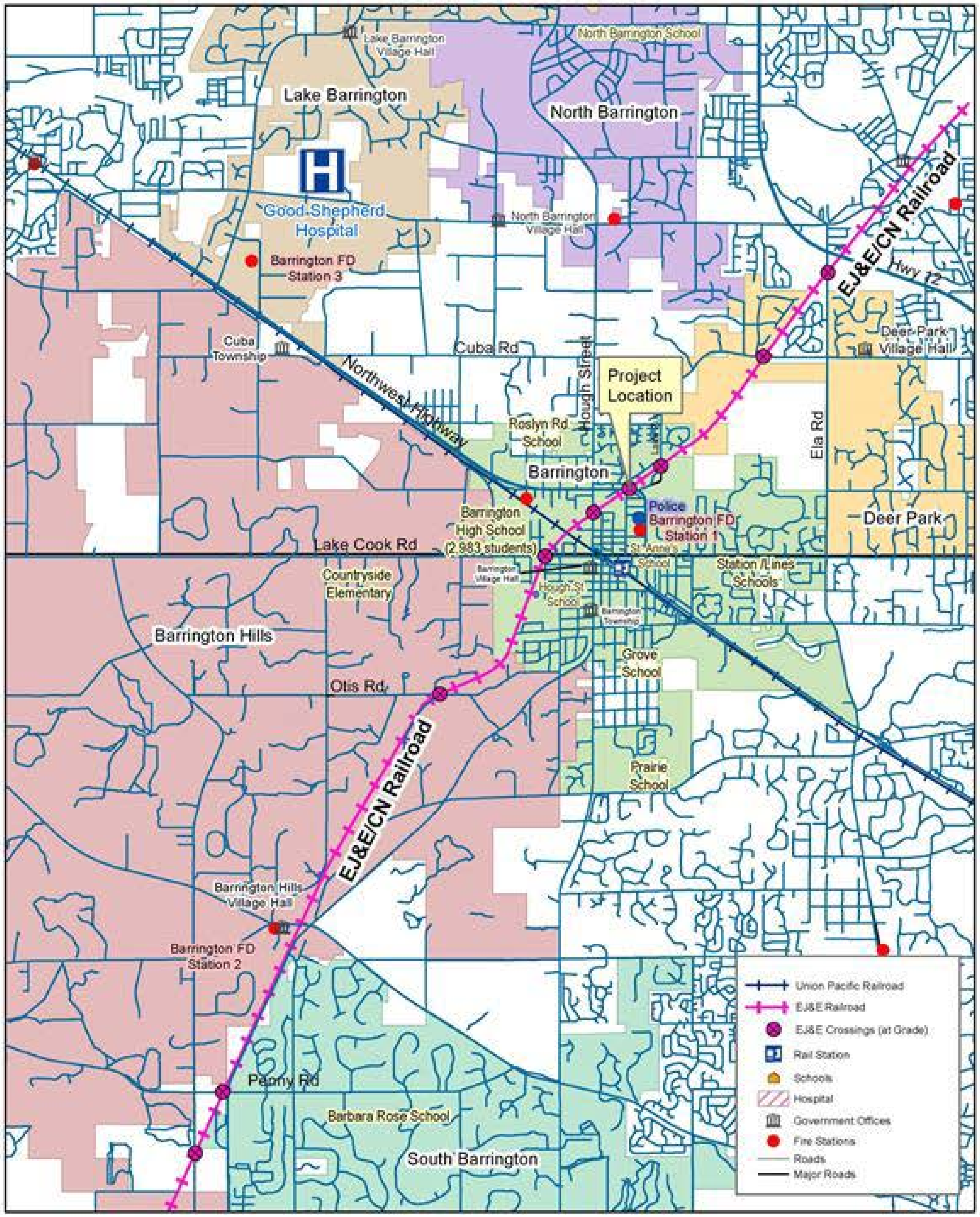
In recognition of its regional importance, the Illinois Department of Transportation ("IDOT") designated U.S. Highway 14 as a Strategic Regional Arterial ("SRA") in April 1993. The Strategic Regional Arterial (SRA) system is a network of approximately 1,500 miles of existing roads in northeastern Illinois. Creation of the SRA system is a major component of Operation GreenLight, an eight-point plan to deal with urban congestion and improve regional mobility. The plan was developed in cooperation with the Illinois Tollway, the predecessor agencies to the Chicago Metropolitan Agency for Planning ("CMAP"), the National Infrastructure Protection Center ("NIPC"), and the Regional Transportation Authority ("RTA"). The SRA system is now a component of the 2040 Regional Transportation Plan (GOTO 2040) and is intended to supplement the existing and proposed expressway facilities by accommodating a significant portion of long-distance, high-volume automobile and commercial vehicle traffic in the region. IDOT also applied the SRA designation to IL Highway 59, which crosses the EJ&E Line at grade in Barrington.

There are two other at-grade crossings of the EJ&E rail in Barrington. One is located at Lake Cook Road/Main Street, which is a major east-west arterial in northeastern Illinois. The road is approximately 25.5 miles in length and stretches from its eastern terminus near Lake Michigan to it western terminus at Illinois Route 62 in Algonquin. The current ADT at Lake-Cook/Main Street in Barrington is in excess of 10,700 vehicles. The other at-grade crossing is at Lake Zurich Road and has an ADT of 2,600 All together, these four Barrington crossings over the EJ&E have a combined ADT of 63,900 vehicles.

In Barrington, the EJ&E crosses all four of these roads and the UP/Metra commuter rail line at grade level in a span of 5,918 feet within Barrington's center as the map on the following page shows. As a result, any CN freight train longer than that can block all four roads and the UP/Metra rail line simultaneously or in quick succession.

U.S. Route 14 Grade Separation At Canadian National Railroad

EJ&E/CN Crossings



Village emergency responders tell me they routinely see trains of 120 or more rail cars passing through the Village on the EJ&E, so this is not an infrequent problem. A quick review of CN's Monthly Operational Report to the Board detailing September 2014 grade crossing delays of ten minutes or more indicates that the CN trains running through Barrington are much longer than the railroad had anticipated in its application. During the month of September 2014, there were 29 trains that passed through Barrington that encountered blockages of more than 10 minutes. The blockages did not necessarily happen in Barrington; however, the information provided by CN showed that they would pass through Barrington.[10] A review of those 29 trains revealed that there was 1 train over 10,000 feet; 15 were between 9,000 and 9,999 (of which 6 were over 9,900); 6 were between 8,000 and 8,999; 2 were between 7,000 and 7,999; 3 were between 6,000 and 6,999; and 1 was between 5,000 and 5,999. In other words, more than 50% of the trains were longer than 9,000 feet, and 76% were greater than 7,000 feet in length.

The overall average length of these trains was 8,568 feet. When Barrington reviewed CN's freight traffic in 2011 in a more comprehensive

[10] While important, the 10-minute blockage reporting issue is not the focal point of this petition. Because the data found on the spreadsheet designated Attachment A indicates that CN may have been holding trains at either side of Barrington to avoid a problem in the Village that would have been shared with the Board, Barrington is greatly concerned it will experience more reportable blockages at its grade crossings following termination of Board oversight.

fashion, the average train length was 5,800 feet long.[11] This means that CN's average train is 2,768 feet longer in 2014 than it was in 2011, perhaps explaining why the actual train counts haven't increased as originally projected in CN's 2007 application.

In the DEIS, the FEIS and the Board's Final Decision, SEA and the Board clearly recognized that the SRA designation reflected the significance of U.S. Highways 30 and 34 to the region. The SRA designation for U.S. Highway 14 was never mentioned – an omission noted by CMAP in its DEIS comments dated September 26, 2008. That omission occurred even though the U.S. Highway 14 crossing has the second highest ADT of any grade crossing on the entire 198-mile EJ&E rail line. As reflected by the following chart, only U.S. Highway 34 has a higher ADT than U.S. Highway 14.

	U.S. 14 in Barrington	**U.S. 34 on Aurora**	**U.S 30 in Lynwood**
Most Recent Crossing ADT Counts[12]	30,800	31,200	22,000
2012 Community Population	10,739	196,569	9,042

In reviewing the foregoing, one must note that even though both crossings experience equivalent ADTs, Aurora's population is almost twenty times the population of Barrington. Furthermore, in Barrington, almost three

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[11] *See* Attachment B, Table A-1, Village of Barrington CN Railway Train Survey Results, May 12, 2011 through June 15, 2011.

[12] From www.gettingaroundillinois.com

times the community's population travels through the Village on U.S. Highway 14 daily, as compared to Lynwood where slightly more than double the population travels on U.S. Highway 30. Similar to the situation in Lynwood, the traffic volumes in Barrington, relative to its population, strongly supports the need to look beyond the local traffic issues in Barrington in weighing the regional positive net impact of a grade separation for this key SRA where it crosses the EJ&E rail line.

The locations of the roadways and impacted EJ&E segments are qualitatively different in the three towns. In Barrington, the EJ&E crosses four roads -- two of them SRA's and one a major east/west route -- and the UP/Metra commuter rail line at grade level in a span of 5,918 feet within Barrington's center. Due to the proximity of the four grade-level crossings and the likelihood of multiple crossings being impacted by one train, it is essential that the multiple crossings be considered holistically in evaluating the need for a grade separation. When all four crossings are viewed in that light, Barrington has a high life safety exposure that, at the very least, warrants a grade separation at U.S. Highway 14.

Without questioning in any manner the need for grade separations on U.S. Highways 34 and 30, the complexity of the Barrington situation is in clear juxtaposition to the simplicity of the grade separation project locations in Aurora and Lynwood (as the attached satellite maps in Attachment C of this verified statement demonstrate.) Neither the Aurora nor Lynwood crossing is located in the communities' core downtown areas, nor could blockages at those two crossings create the type of inter-related vehicular traffic gridlock that has been occurring in Barrington since CN greatly increased the number of trains running through the Village. Barrington alone has the problem of experiencing excessive queue lengths at blocked crossings that can last for a considerable period of time after the crossing gates have lifted. That problem does not exist in either Aurora or Lynwood.

Although the overall traffic traversing the roadways through Barrington was manageable on the current road infrastructure prior to CN's acquisition of the EJ&E, the impact of CN's increased trains randomly interrupting all traffic flow on a daily basis has proven to be a recipe for regional gridlock. Therefore, after the Board denied any grade-separation relief to Barrington when approving the acquisition and well before the full implementation of CN's operating plan was projected to be accomplished, Barrington made the decision in 2010 to file an application with USDOT seeking a federal grant under the TIGER II program which, as also explained on the DOT's web site, is intended to "fund projects that have a significant impact on the Nation, a region or a metropolitan area."[13]

According to USDOT's guidelines, in order to qualify for a grant:

> Applicants must detail the benefits their project would deliver for five long-term outcomes: safety, economic competitiveness, state of good repair, livability and environmental sustainability. DOT also evaluates projects

[13] http://www.dot.gov/tiger/about.

> on their expected contributions to economic recovery, as well as their ability to facilitate innovation and new partnerships.[14]

In our application[15], Barrington pointed out that the Board's decision approving CN's acquisition of the EJ&E rail line had transformed a rarely used local service rail line into what promised to become a major Class I international/intermodal freight superhighway that CN – the only tri-coastal Class I railroad network in North America touching the Pacific, Atlantic and Gulf coasts – planned to use to route shipments of Asian goods arriving at the Port of Prince Rupert in Canada down to customers throughout the United States. Because there had been no prior indication whatsoever that CN, shortly after acquiring the EJ&E, ***would develop an entirely new line of business from within the confines of its existing rail network***, Barrington relied on the same freight traffic projections that were considered by the Board in 2008 to support our 2010 TIGER II application.

That application explained that the traffic impacts created by CN's expanded operations on the EJ&E are a major negative factor in terms of commuter efficiencies, public safety, environmental sustainability, economic viability, and livability of the northwest region of the greater Chicagoland metro area – particularly the Barrington area. Barrington provided USDOT with a detailed list of reasons why we requested grade separation funding for U.S.

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[14] Id.

[15] *See* Attachment D.

Highway 14, rather than our other SRA at Hough Street/IL 59. Those reasons were (and are) as follows:

- It has the highest average daily traffic in Barrington with a 2015 projection of 33,949 ADT; and the second highest ADT of any grade crossing on the entire 198-mile CN/EJ&E rail line.

- It is the only U.S. highway crossing the CN/EJ&E rail line that would lack a grade separation once the acquisition's mitigation conditions are completed.

- Projected vehicle delay increases due to CN's freight traffic were the highest of all four Barrington crossings with a delay increase of 1,177%.

- It is considered a Strategic Regional Arterial (SRA) by the Illinois Department of Transportation intending to function as part of a regional arterial system to carry high volumes of long-distance traffic in conjunction with the other SRA routes and the regional expressway and transit systems.

- It is the only one of the three major roadways intersecting with the CN/EJ&E in Barrington that does not intersect with the UP/Northwest Metra commuter line.

- It is the only one of the four roadways intersecting with the CN/EJ&E in Barrington that has two lanes of traffic in both directions (all the others are single lane roads in each direction.)

- Of the two best options for a grade separation (U.S. Highway 14 or Hough Street/IL Route 59), this location would have fewer impacts in terms of the necessity to acquire and demolish existing residential and business properties and was the least expensive grade separation project, as well as impacting the most traffic and reducing the most delay of the two crossings.

- It would have the broadest right-of-way (ROW) to facilitate the ability of emergency response vehicles to travel as necessary on the roadway's shoulders to navigate through vehicular traffic.

- It is the most direct route for transporting the region's residents located southeast of the CN/EJ&E to the region's acute care hospital (Advocate Good Shepherd Hospital) with the region's most advanced cardiac care unit and state-of the-art emergency department and stroke unit.

- It would provide an alternative routing for certain school buses, thus minimizing the routings forced to travel over the CN/EJ&E.
- It would provide unimpeded access for the region's public to the 45-acre Citizens Park that was created in 2007 featuring the only park tree house in Illinois that is fully accessible to disabled persons.

Barrington's TIGER II application also addressed the five Selection Criteria-Long Term Outcomes, namely: State of Good Repair, Economic Competitiveness, Livability, Environmental Sustainability and Safety. *See* Attachment C, at 9-15. The key element supporting the grade separation as indicated in the application was the fact that alleviating vehicular travel delays is a critical benefit stemming from the U.S. Highway 14 grade separation project because over a period of half the life cycle of the improvement it would mitigate delay costs of nearly $143 million.

Those savings result because the arterial roadways that intersect the EJ&E rail line in Barrington are a vital pass-through for commuter traffic between bedroom communities in the northwest area of the greater Chicagoland region and places of employment in downtown Chicago and its near suburbs. Also, a consistent pattern of commuter traffic gridlock at the EJ&E crossings in Barrington impacts not only the livability and viability of the Village itself, but in fact, all the outlying suburban communities located north and northwest of Barrington. Simply put, if people cannot reliably reach work and schools to the southeast of Barrington from their homes north and northwest of Barrington in a timely manner, or retail establishments in the heart of Barrington, they are likely to avoid living in those communities or supporting Barrington's economy. Over time, this will have an immeasurable impact on the ongoing viability, property values, and tax bases of the towns and villages that serve as the northwest regional bedroom communities in the greater Chicagoland area, not to mention the local Barrington economy. With a grade separation on the main northwest-southeast arterial spoke running through Barrington, a measure of transportation reliability will be restored to the region that was lost when the Board approved CN's acquisition of the EJ&E without ordering grade-separation mitigation at the U.S. Highway 14 crossing. Indeed, the absence of such relief is undermining the recognized and universally accepted goals of the SRA system and has the potential to seriously undermine the local retail economy.

I must stress that the acute need for a grade separation at the U.S. Highway 14 crossing is solely attributable to the significant increase in the number and length of freight trains that is unfolding following CN's acquisition of the EJ&E line. Without the increase in the freight traffic, Barrington would not have sought the TIGER II grant in 2010. Now that the initial projected need will be compounded by the dramatic increase of unanticipated movements of energy-related commodities, a grade separation in Barrington is even more crucial to the region because the volumes of freight related to that newly developing market clearly portend more and longer trains, and even the double-tracking of the EJ&E. *See infra* at 20.

While the negative economic and livability impacts associated with CN freight traffic are significant, ultimately, safety is the primary objective that underlies both Barrington's 2010 TIGER II application and our request for grade-separation mitigation in this proceeding. Barrington's TIGER II application showed that a grade separation at the U.S. Highway 14 crossing will reduce vehicle crashes at the intersection of U.S. Highway 14 and Illinois Route 59 by 24%.[16] Given the further unanticipated increase in CN freight trains due to energy commodities, that figure is now understated.

As more fully supported in the Verified Statement of Karen Lambert, President of Advocate Good Shepherd Hospital, the project will reduce deaths and more serious complications from injuries or illness by allowing clear access to the area hospital for those located south/southeast of the EJ&E.[17] The alternative hospitals that would be accessed by emergency responders blocked by a train on the EJ&E adds an unacceptable time delay to victim treatment – especially the treatment of Barrington's seniors living in our two retirement communities. A senior suffering a stroke can quickly reach Good Shepherd, which is located just 2.89 miles away via U.S. Highway 14, if the roadway is unimpeded by a freight train. If that same patient has to be diverted to another hospital because of freight traffic, the trip to St. Alexius Medical Center in Hoffman Estates is 8.06 miles or 11.25 miles to Northwest Community Hospital in Arlington Heights. These life safety issues must be prioritized in

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[16] *See* Attachment D at 14.

[17] *See* Attachment E.

light of the unanticipated increase of hazardous materials being transported on the EJ&E.

When, on October 15, 2010, USDOT awarded Barrington a $2.8 million TIGER II grant for the Phase I engineering/environmental review for a grade separation at the U.S. Highway 14 crossing, it confirmed that U.S. Highway 14 has a significant regional impact. In addition to the $2.8 million TIGER II planning grant for Phase I (the largest of the TIGER II planning grants awarded in that round), IDOT provided the local match of $700,000. The Phase I work has now been completed and the project design has been approved and finalized by all parties in the "Project Study Group" after having received substantial input by local stakeholder residents and businesses under the leadership of the "Community Advisory Group." The "Project Study Group" (PSG) consisted of representatives from Barrington, CN, IDOT, the various involved state and federal regulatory agencies, as well as the project consultant. The PSG – as a group – had primary responsibility for the project development process, and provided technical oversight and expertise in key areas, including study process, agency procedures and standards, and technical approaches.

Furthermore, a total of $14,012,767 has been committed to Phases II and III of the project by regional stakeholder municipalities through the regionally allocated federally funded Surface Transportation Program (STP) and by IDOT. The project has undergone the "Context Sensitive Solution" (CSS)

Phase I environmental review process, in which CN also participated, as required by IDOT and FHWA. This process defines the purpose and need for a project and then seeks stakeholder input to determine the best grade separation solution based on the particular conditions specific to the project location site. CSS has the goal of improving the safety and mobility for the traveling public while preserving and enhancing the scenic, economic, historic and natural qualities of the settings impacted by transportation projects. Because the Barrington grade separation requires the relocation of a creek, the project is far more complex than the projects in Lynwood and Aurora. Therefore, we are still facing a funding shortfall of approximately $47 million for a project that was not required before CN acquired the EJ&E Line.

Due to email records kept by Village staff, I am aware that during the TIGER-funded environmental review process for the grade separation, Patrick Jones, CN's Manager of Public Works, commented, in an email dated April 5, 2013, that "CN confirmed that a second track in this area would be consistent with other double-tracking projects completed and planned since CN's takeover of the former EJE."[18] The likelihood of double-tracking the EJ&E in Barrington was reiterated again on February 5, 2014 when CN, which participated in consultations with FHWA, USEPA, the United States Army Corps of Engineers, IDOT and Barrington, requested in a second project-related email that the bridge abutments that would carry CN's tracks over the lowered U.S. Highway

[18] Attachment F.

14 be wide enough to accommodate two tracks. As these communications demonstrate, CN is well aware that the current single track through Barrington is insufficient to handle both the traffic projected in its 2007 Application and the wholly unanticipated energy commodities traffic that has begun developing on its network during the past few years.

Although CN never mentioned the possibility of double tracking the segment of the EJ&E Line that passes through Barrington in its 2007 application, it is my reasoned conclusion that it is only a matter of time before CN will double track through Barrington. That conclusion is based on the CN communications generated in PHASE I of the project planning, as well as the post-2010 volume of new energy-related traffic on CN's network in Western Canada that is in the process of being developed and that will increasingly move over the EJ&E Line to CN's strong destination assets that serve refineries on the Gulf Coast and in the Midwest. Importantly, the line capacity analysis done by SEA in 2008 buttresses this belief, because it showed that the single-line EJ&E would be at capacity once CN's freight traffic projected for the EJ&E was fully realized.[19]

I am also aware that in June 2014, the Canadian Association of Petroleum Producers reported that:

> At the beginning of 2013, the rail loading capacity originating in Western Canada was only about 180,000 b/d. As a result of a number of new facilities and minor expansions coming into service throughout 2013, the

[19] DEIS, Chapter 2 at 2-25.

> capacity has now increased to 300,000 b/d. By the end of 2015, western Canada uploading capacity for crude oil is expected to exceed 1.0 million b/d. Several proposed facilities can be further expanded beyond the initial stated capacity so it is conceivable that rail capacity could be expandable to 1.4 million b/d.[20]

Because CN itself admitted in its recent financial analyst call covering third quarter 2014 results that 25% of its traffic now "touches Chicago,"[21] it's impossible to believe the railroad will not maximize its capacity on the EJ&E. Refineries on the Gulf Coast that are located on CN's network are already best equipped to handle heavy crude, and would also give producers an outlet to export markets.

In particular, I invite the Board's attention to the transcript that CN produced of CN's Third Quarter 2014 Financial Results Conference Call held October 21, 2014. During the course of the call with members of the financial community, CN noted that it has "concentrated on the Edmonton to Chicago corridor with investments on branch lines, double track and yard capacity."[22] CN also noted that it "doubled our crude carload from last year."[23] It also commented that "[f]rom the energy renaissance we aim to achieve our target of doubling the 2013 carload ahead of schedule. Our unique access to Canadian production regions, the trend toward unit train operation on network, and our

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[20] Canadian Association of Petroleum Producers, Crude Oil Forecast, Markets and Transportation, June 2014.

[21] Attachment G, Earnings Call Transcript at 27.

[22] Id. at 3.

[23] Id. at 4.

strong destination franchise should make the continued growth in the fourth quarter and into 2015."[24] CN also commented that "people like our destination franchise, they also very much like super Chicago solution."[25] I also note that CN proclaimed "[t]he ability to connect our own networks in these webs around Chicago is just huge, it's a great asset."[26] A graphic illustration of "CN's Crude-By-Rail Franchise" is found at page 77 of CN's 2013 Fact Book, a copy of which is reproduced at page 5 of the Petition to Reopen.

While CN acknowledged that drilling may be susceptible to short-term pricing, it also noted that long-term oil plays in Western Canada are different in that Canadian heavy crude has different sensitivities than shale. *See* Transcript at 19, 20. This latter point is extremely significant because it has been estimated that the Province of Alberta resides on top of oil sands that hold 167 billion barrels of these reserves,[27] and this freight rail traffic is just beginning to ramp up.

In its 2013 Fact Book, CN accurately predicts that:

> [I]t has the scope to double its crude-by-rail business in 2013. CN crude-by-rail shipments are characterized by a longer average length of haul, more than double the average for all CN traffic, providing greater revenue potential. As pipeline construction is delayed, oil production continues to increase and major oil players continue to invest heavily in

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[24] Id. at 5.

[25] Id. at 18.

[26] Id. at 26.

[27] Canadian Association of Petroleum Producers, Crude Oil Forecast, Markets and Transportation, June 2014.

> rail infrastructure, crude-by-rail shipments will remain a viable alternative shipping solution.[28]

During the course of the Earnings Call, CN reemphasized its belief that "the acid test of crude by rail for an oil producer an[d] oil buyer has passed. We made that test more than one time this year and last year. So the market sees the value of that transportation mode."[29]

I urge the Board to take CN at its word in weighing the impact energy-related commodities transport will have in Barrington:

> CN's vast network can provide customers with accessible single-line connectivity from Western Canada to various destinations, including the Gulf Coast or Eastern Canada, with efficient movement through the all-important Chicago area.... For crude oil producers, CN offers a number of advantages relative to other modes of transportation, including competitive cost and superior geographic reach. An additional CN advantage is scalability. Shippers can move one, two, 20, or 100 or more rail cars depending on their needs. Flexibility is another advantage – enabling shippers to move their product to various destinations where they can capitalize on price differentials in different markets.[30]

All this emerging energy commodity volume is in addition to the projected volumes in CN's 2007 application. As CN has highlighted since 2007, a significant portion of that original traffic was meant to travel on the EJ&E Line in order to avoid the crippling Chicago bottleneck. While the recessionary economy may have impacted CN's original intermodal traffic projections on the

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[28] Fact Book at p. 79.

[29] Earnings Call Transcript at 20.

[30] 2013 CN Fact Book at p. 76.

EJ&E to date, a stronger economy will clog the EJ&E before long. In fact, CN's 2013 Fact Book noted that "West Coast volumes on CN have increased 65 per cent over three years to 2012, well beyond the growth of the economy."[31] In addition, CN acknowledged that "[f]our years ago, about 25 per cent of CN international containers from the West Coast were destined for the U.S. Today that number exceeds 40 per cent."[32]

All this being said, I must make it clear that Barrington recognizes CN's right to develop new markets and grow its business and profitability. I cannot, however, overlook the extremely harmful impact that the substantial volume of traffic will have on Barrington and the surrounding region – especially when the greatly increased energy commodities traffic that has never been considered by the Board in this proceeding is coupled with the known and anticipated traffic that was forecast in CN's 2007 application.

The financial magnitude of the harm caused by blockages of the U.S. Highway 14 crossing is reflected in the required Cost/Benefit Analysis that was presented to USDOT in Barrington's TIGER II application. I must stress that this analysis did not consider the additional new energy related traffic that CN is currently developing. The Cost/Benefit Analysis supporting the TIGER II grant reflects total value of benefits over the lifetime of the grade separation project at the U.S. Highway 14 crossing in the amount of $353,710,754. That total reflects the total value of reduction in delays of $169,656,261; the total

[31] 2013 CN Fact Book at 15.

[32] 2013 CN Fact Book at 48.

value of accidents and injuries avoided of $176,249, 210; and total value of fuel saved in the amount of $7,805,282. That benefit far exceeds the total estimated cost of $66,607,787 for the grade separation project. *See* Attachment D at pp. 16 – 21.

As is very obvious from the transcript of CN's earnings call, CN's ability to avoid rail gridlock in downtown Chicago is already allowing CN to reap significant operational and financial benefits. Those benefits will continue to accrue to CN in perpetuity. I am confident that if the STB were required to perform a cost/benefit analysis similar to that which Barrington prepared for USDOT, it would become clear that the cumulative benefit to the region of a grade separation at U.S. Highway 14 in Barrington would far outweigh the relatively minimal and short-term costs to CN of contributing funding for its construction.

The Board must face and address the fiscal constraints that Barrington and the State of Illinois are confronting. It is beyond the ability of Barrington to finance this grade separation project, as the total cost amounts to five times the Village's annual operating budget. The taxpayers of Illinois are also unable to finance this project. As explained in a letter dated November 13, 2014, from John Fortmann (who serves as the senior IDOT official for northeastern Illinois and who oversaw and approved the TIGER II grant), "[t]he Department is committed to working with the Village of Barrington in efforts to move this project forward. Unfortunately, current State budgets at this time do not allow for the programming of funds."[33] Given these known realities, and the fact that both federal and State taxpayers have already been burdened with substantial costs that subsidize CN's profitability, the Board's order for additional grade separation mitigation from CN is the ***only way*** to undo the irreparable harm that has and will be suffered by Barrington and the northwest Chicagoland region by CN's freight trains that do and will consistently block the free flow of traffic on U.S. Highway 14.

In addition to the volume-related adverse impacts, I must also note that significant potential risks are associated with the transportation of flammable hazardous materials on the EJ&E. Because of my active involvement in the ongoing PHMSA rulemaking, I am painfully aware that the question of additional spill risk to Barrington cannot be avoided. On August 18 of this year, a group of Barrington Village officials and I hosted a meeting with CN senior management to discuss hazmat traffic and the railroad's response capabilities. At that time, we were told that 8% of the traffic that moves through Barrington consists of hazardous materials, as compared with CN's national line average of only 4%. No further specific details regarding the hazardous materials were provided.

Even if there is a derailment that does not result in a release of hazmat, a breakdown that causes the train to stop for an extended period, a crawling train, or some other incident that blocks the U.S. Highway 14 crossing (such as

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[33] Attachment H.

the collision with a tractor trailer that occurred May 23, 2013 involving a long CN freight train that clipped the rear end of a truck stuck on the EJ&E), can and will disrupt traffic flow for extended periods. As the Board well knows, CN's freight operations were already projected to cause 98 additional hours of daily delay for vehicular traffic moving through Barrington on U.S. Highway 14 -- even without the added burden of new, post-2010 energy commodities traffic.[34]

Should a derailment entail the release of extremely flammable hazardous materials from only one tank car, it could create substantial repercussions, especially if the contents of the derailed tank car are unknown and if toxic smoke is generated by an ensuing fire. According to published reports concerning a CN derailment that occurred near Clair and Wadena, Saskatchewan on October 7, 2014, local officials kept people eight kilometers away from the scene that was generating huge plumes of thick, black, heavy smoke. If this derailment had happened in Barrington on the EJ&E, it would have required an evacuation zone covering most, if not all, of the Village. This is a nightmare scenario requiring that at least one roadway be clear of any freight blockages if we are to have any hope of maintaining public order in such an event.

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[34] The 98 hours of delay at U.S. Highway 14 have been accepted by the Board and CN as accurate during the oversight period for this transaction, in contrast to the erroneous figure of 29 hours of delay used throughout the NEPA review in 2008.

As PHMSA explicitly recognized at page 192 in its Regulatory Impact Analysis in its current rulemaking docket released in July 2014, ***"a catastrophic incident could be triggered if as few as 5 tank cars were to split open following a derailment."*** As this plainly indicates, an entire train need not derail in order to cause extensive community damage.

I have personally observed the extensive damage that can be inflicted on a small community by the release of crude oil. In December 2013, I was invited to view the devastation in the heart of the small town of Lac-Mégantic, Quebec. While the incident in Lac-Mégantic was an extreme worst case scenario derailment, the fact remains that the transportation of crude oil presents the opportunity for catastrophic damages. In fact, PHMSA (after a review of major crude and ethanol mainline derailments between 2009 and 2013) announced that "PHMSA and FRA have concluded that the historical train accident record alone cannot determine the probability of a catastrophic event."[35] Those recent changes reflect the enormous increase in rail shipments of crude oil, as well as the shift to unit trains. As the CN's Earnings Call confirms, CN is in the process of increasing its use of unit trains in this market.[36] However, even now one cannot ignore the fact that many of CN's manifest trains that pass through Barrington have multiple tank cars included in the train consist.

It is particularly disturbing that PHMSA identified several recent incidents in which derailments involving hazmat releases caused fires that

[35] PHMSA, Regulatory Impact Analysis at 20 (emphasis added.)

[36] Earnings Call Transcript at 4.

have burned for several days because there was no possible response other than allowing the infernos to burn out. PHMSA's list included four recent incidents involving CN trains, including a mixed freight train with 122 cars that derailed 19 cars and a locomotive near Plaster Rock, New Brunswick on January 7, 2014. Nine of the cars—five carrying crude oil and four loaded with propane—burst into flames and the fire burned for several days. The probable cause of the accident is thought to have been a cracked wheel.

The CN incident with which I am most familiar occurred on June 19, 2009 in Cherry Valley, Illinois. In this incident, 19 tank cars carrying ethanol derailed due to a washout of the track. Thirteen of the derailed tank cars were breached or lost product and caught on fire. At the time of the derailment, several motor vehicles were stopped on either side of the grade crossing waiting for the train to pass. As a result of the fire that erupted after the derailment, a passenger in one of the stopped cars was burned to death on the highway, while other passengers were injured. It was this incident that caused Barrington to direct counsel to file its 2012 petition for rulemaking with PHMSA that is part of the basis for the agency's ongoing rulemaking. It is also this incident that was an eye opener for me when I learned from first responders involved in that incident exactly how difficult and time-consuming it was to execute an evacuation order even under the best of circumstances in which an area's evacuation roadways are not blocked by the train involved in the incident.

In the Cherry Valley derailment, first responders evacuated an area within a ½ mile of the derailment zone as called for under hazmat response protocols. I have attached a map (Attachment I) that shows Barrington's potential evacuation zone should such an order need to be carried out if a CN flammable hazmat train derailed in the Village. It shows the enormity of the task Barrington would be facing. Potentially, we would need to evacuate up to 2099 business or residential parcels within that zone, including four schools, the Barrington Library, Village Hall, the post office, our main Public Safety Building that headquarters our police, fire and ambulance services, the Metra commuter train station, three senior living and/or nursing care facilities, one hospice, most of our commercial downtown area, six churches, and eight public parks and/or recreational facilities. Making matters worse, located within that evacuation zone are two electrical substations, as well as the Village's water treatment plant and three water facilities. Such an evacuation would be a staggering challenge for the Village with no grade separation – especially when speed of evacuation can mean the difference between life and death.

I know that CN is not the only railroad that has been involved in recent incidents where derailed tank cars have been breached and caused extensive fire-related damage and forced nearby residents to be evacuated. However, as PHMSA and FRA have found, the confluence of several recent factors has given rise to higher expected damages and probability of a catastrophic event. The recent increase in such incidents cannot be ignored. Indeed, "[d]ue to these recent changes, PHMSA and FRA have concluded that the historical train accident record alone cannot determine the probability of a catastrophic event."[37] Without doubt, PHMSA's recent review of post-2008 developments in the rail transportation of crude oil and ethanol undercut the Board's original NEPA review claims that "hazardous material releases have historically been, and are expected to continue to be, extremely rare."[38] Of course, I fully understand that the Board never considered the possibility of large volumes of energy-related commodities being extensively transported over the EJ&E rail line because it necessarily relied on CN's general assumptions that the same type of traffic would be transported if the Transaction was approved as was being transported in 2006. However, SEA's 2008 assumptions must be disregarded in light of PHMSA's 2014 conclusions that follow PHMSA's and FRA's review of the current situation.

I must stress that it is essential for the Board to fully consider the possibility that if a train were to derail and release highly explosive and flammable materials in Barrington, the ability of emergency responders to react must be maintained by the mitigation that can only be provided with a grade separation at U.S. Highway 14. Given that an explosive derailment during a school day could easily impact the 3,000 students who are enrolled at Barrington High School, which is located a few hundred feet west of the EJ&E Line, keeping open one of the only two primary evacuation routes from the

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[37] RIA at 20.

[38] FEIS, Ch. 2.7, at 2-67.

school is vital. While such an event remains only a remote possibility, the need for at least one grade separation in Barrington is plainly evident.

I do not wish to be viewed as alarmist or considered an anti-railroad NIMBY. To the contrary, Barrington officials have long had a very productive working relationship with UP, which operates approximately 70 trains a day through Barrington (both freight and commuter rail). Unlike CN, UP not only provides substantial benefits to Barrington and the surrounding region on a daily basis by conducting commuter operations that remove thousands of vehicles from the roadways, but it has actively looked for ways to be a good corporate partner in Barrington.

In light of the weight of the foregoing issues and the fact that the community approval process for the TIGER II grant reflected the public's overwhelming support for the grade-separation at U.S. Highway 14, the superficial reasoning expressed by the Board in 2008 for denying grade-separation mitigation in Barrington, namely that "a grade-separation would severely affect the character of the community by removing trees and/or buildings as well as potentially affecting access to local businesses,"[39] must be reversed and rejected. The vehicular gridlock created by CN freight trains, the daily risk to life safety when emergency vehicles are blocked at the rail crossings, let alone the potentially catastrophic damages associated with an explosive derailment of a train transporting multiple tank cars of crude oil,

[39] FEIS at 4-14. This same reasoning was repeated by the Board in its December 24, 2008 Decision at p. 44.

ethanol, condensate, or other flammable hazmat liquids, make this rationale indefensible moving forward.

Because CN did not in any manner anticipate an "Energy Renaissance" future in its 2007 control application for the EJ&E, the Board cannot be faulted for not foreseeing this development in its 2008 NEPA review and approval decision. However, now that the surge is plainly evident and is here to stay, the Board must reassess its denial of grade-separation relief at the U.S. Highway 14 crossing in keeping with its oversight commitment to the affected public. The Board should follow USDOT's lead and accept the conclusion that a grade separation for U.S. Highway 14 is required because of CN's acquisition of the EJ&E, even before consideration of the recent developments which promise greater volumes of hazmat traffic in the years ahead.

I respectfully submit that CN will ultimately reap hundreds of millions in new revenues and operational savings from being able to use the time-saving EJ&E Line to avoid having to move trains directly through Chicago. CN's Claude Mongeau explained the incredible benefit of the EJ&E purchase in the recent Earnings Call by stating:

> This is why we're growing faster. This is why we're growing at low incremental cost. This is why we bounce back quicker when we face adversity. This is why we're back in sync across all our supply chain at the moment. This is why we're in business, it's a big asset. …. The ability to connect our own networks in these webs around Chicago is just huge…. We worked hard. It took us many years to negotiate, many years to get the approval, all the work to get it done in terms of integration and we're reaping the benefit of all this hard work in terms of resiliency and services. It's also a huge opportunity from an asset standpoint and efficiency

standpoint.[40]

While CN will continue to benefit from its bargain in acquiring the EJ&E Line in 2009 for only $300 million with cash on hand instead of having to construct a prohibitively expensive bypass around Chicago, Barrington has no such upside to anticipate. Instead, on the eve of its 150th birthday, Barrington, which has spent the last decades investing in the preservation and economic vitality of its historic downtown, faces a wall of freight trains impeding access to its businesses, its commuter rail line, and the provision of emergency medical care and public safety protection. This will impact our local economic growth, out tax base, the Village's overall livability, and most importantly, the life safety of our residents. Neither Barrington nor the State of Illinois have -- for the foreseeable future -- the financial resources to construct this grade separation project in order to counter the harm that the region is (and will be) experiencing as a result of CN's expanded freight operations. It is only fair and equitable for the Board to finally require CN to pay the balance of the cost for constructing a grade separation at the U.S. Highway 14 crossing.

FURTHER SAYETH THE AFFIANT NOT.

VERIFICATION

I, Karen Darch, declare under penalty of perjury that the foregoing is true and correct. Further, I certify that I am qualified and authorized to file this Verified Statement.

[40] Earnings Call Transcript at 26.

Executed on November 24, 2014.

Karen Darch

Karen Darch

ATTACHMENT A OF MAYOR KAREN DARCH VERIFIED STATEMENT

POST-ACQUISITION DATA FOR REPORTABLE BLOCKAGES ON THE EJ&E

(Spaulding to Leighton Line Segment)

Includes March 2009 through October 2014 Data

Roadway Name	Gilmer Road	Old McHenry Road	Oakwood Road	Main Street in LZ (SR 22)	Old Rand Road (ADT of 4,300)	Ela Road	Cuba Road	Lake Zurich Road	US 14	Hough Street (IL 59)	Lake Cook/ Main Street	Otis Road	Penny Road	Old Sutton Road
Total Blockages	219	83	70	57	Crossing Omitted From All CN Reports	148	312	43	60	61	61	191	87	120

NOTES:

- Numbers are conservative based on early implementation CN undercounts.
- Grade crossings are arranged from north to south on the EJ&E.
- Blue cells indicate Barrington's four grade-level crossings.

Table A-1
Village of Barrington CN Railway Train Survey Results
May 12, 2011 through June 15, 2011

Length of Measurement Segment:	3,910 ft
A.M. Peak Period for Vehicles:	6:30 - 8:30 A.M.
P.M. Peak Period for Vehicles:	4:00 - 6:00 P.M.
Number of valid train observations collected:	211
Maintenance Trucks Observed:	13
Train Stoppages Observed:	6

Northbound Trains:	92
Southbound Trains:	119
Trains greater than 6,800 feet long observed:	87 (41%)
Trains greater than 10,000 feet long observed:	7 (3%)
Average train speeds less than 39 mph:	184 (87%)

Trains by Time of Day (Observed over 35 Days)

Hour Start	Number of Trains	Average Obs. Per Day	Average Speed (mph)	Average Length (ft)
12:00 AM	5	0.14	34	7,760
1:00 AM	6	0.17	30	7,767
2:00 AM	9	0.26	32	6,422
3:00 AM	11	0.31	33	7,382
4:00 AM	11	0.31	32	7,209
5:00 AM	10	0.29	32	7,800
6:00 AM	3	0.09	27	5,800
7:00 AM	5	0.14	33	6,580
8:00 AM	13	0.37	30	5,777
9:00 AM	11	0.31	32	5,209
10:00 AM	10	0.29	33	4,800
11:00 AM	10	0.29	34	3,770
12:00 PM	14	0.40	30	5,236
1:00 PM	11	0.31	34	4,245
2:00 PM	13	0.37	34	4,838
3:00 PM	8	0.23	33	5,850
4:00 PM	11	0.31	35	4,073
5:00 PM	11	0.31	30	5,191
6:00 PM	4	0.11	30	7,025
7:00 PM	9	0.26	28	7,056
8:00 PM	4	0.11	33	5,150
9:00 PM	7	0.20	30	6,443
10:00 PM	8	0.23	32	6,400
11:00 PM	7	0.20	34	6,043
Total	211	6.03	32	5,800

Trains by Day of Week (Observed over 35 days)

Day	Number of Observations	Trains per Day	Average Speed (mph)	Average Length (ft)
Monday	39	8	31	5,400
Tuesday	29	6	32	5,200
Wednesday	30	6	30	5,400
Thursday	28	6	34	5,600
Friday	34	7	32	5,926
Saturday	24	5	35	7,167
Sunday	27	5	31	6,596
Total	211	6	32	5,800

From the observations, a "typical" CN train currently running through the section during this period had a length of 5,800 feet and a speed of 32 mph.

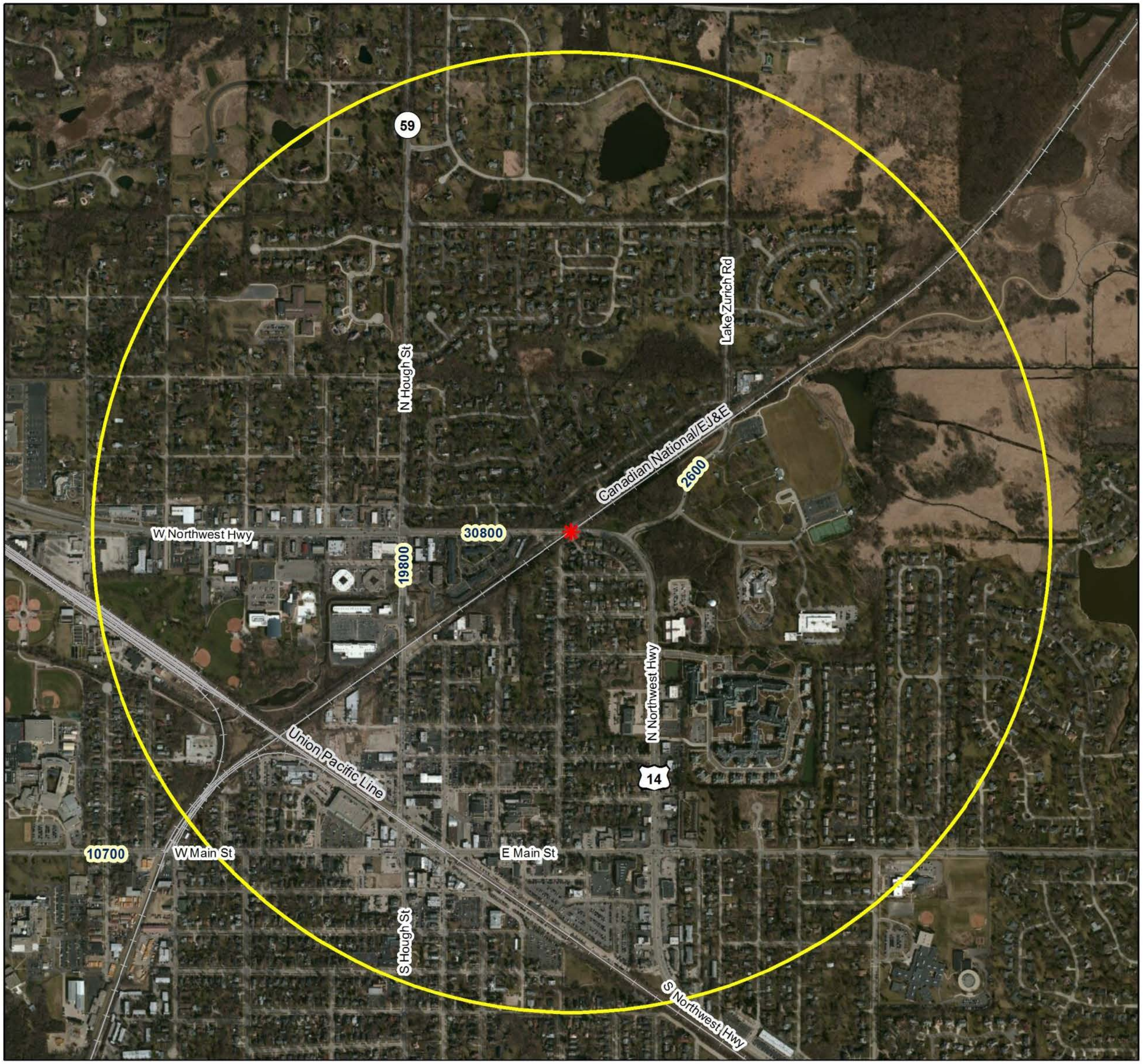
There was an overall average of 6 trains per day running on the section during this period.

The busiest day for train traffic was Monday, with 18.5% of the train traffic during this period, or about 8 trains throughout the day.

ATTACHMENT C TO MAYOR KAREN DARCH VERIFIED STATEMENT

SATELLITE MAPS OF:

BARRINGTON
AURORA
LYNWOOD
GRADE SEPARATION PROJECT AREAS



VILLAGE OF BARRINGTON
a great place to live, work, and play

US 14 CN/EJ&E Crossing
Barrington, IL

Village Hall - 200 South Hough Street
Barrington, IL 60010-4399
Phone: 847-304-3400
Hours: Mon - Fri: 8:00 - 4:30
www.barrington-il.gov

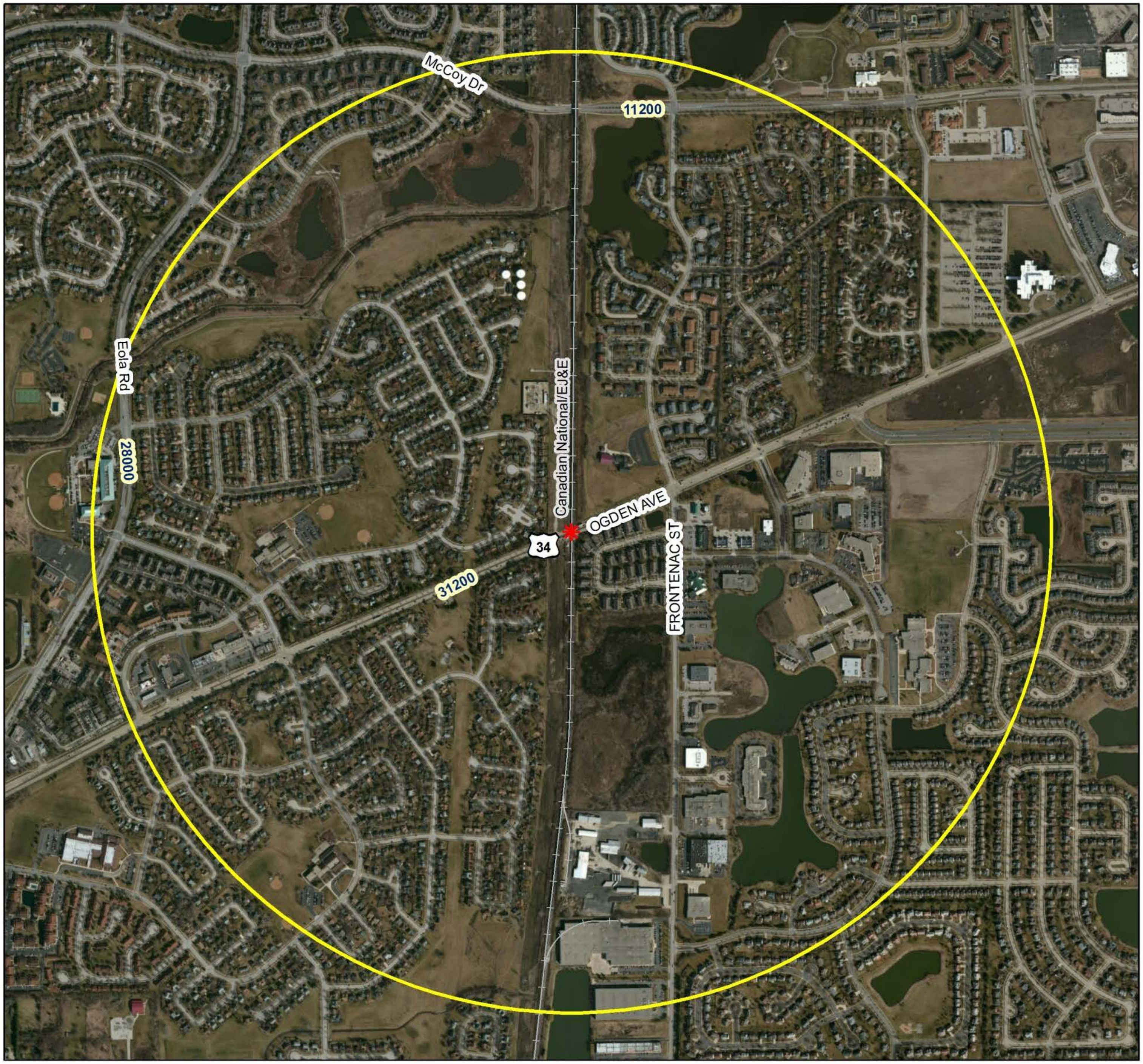
* Grade-level RR Crossing
Railroad
8,000 Foot Diameter

ADT Source: IDOT

0 500 1,000 Feet

N

Projection: State Plane (Illinois East)
Map Units: Feet
Source: VOB GIS, Cook Co., Lake Co.
Date : 11/10/2014



VILLAGE OF BARRINGTON
a great place to live, work and play

US 34 CN/EJ&E Crossing
Aurora, IL

Village Hall - 200 South Hough Street
Barrington, IL 60010-4399
Phone: 847-304-3400
Hours: Mon - Fri: 8:00 - 4:30
www.barrington-il.gov

RR Crossing

- To be grade-separated
- Railroad
- 8,000 Foot Diameter

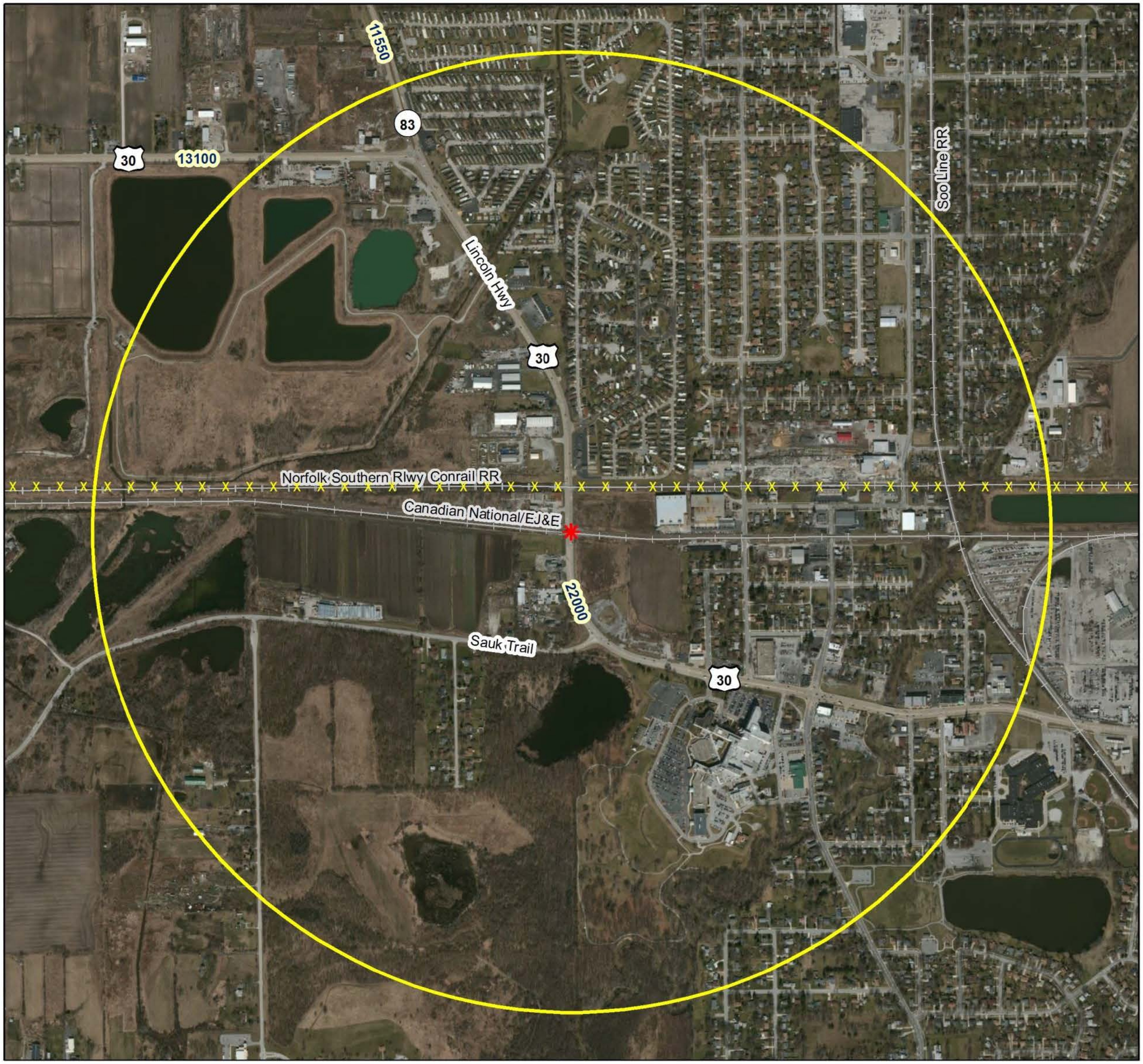
ADT Source: IDOT

0 500 1,000 Feet

N

Projection: State Plane (Illinois East)
Map Units: Feet
Source: VOB GIS, Cook Co., Lake Co.
Date : 11/10/2014

Disclaimer of Liability:
GIS maps and related data contained therein ("maps and data") made available by the Village of Barrington are intended for reference purposes only.
The Village provides such maps and data AS IS without any implied or expressed warranties as to its accuracy and completeness. Such maps and data are believed to be accurate, but accuracy is not in any way guaranteed and modifications are made to such maps and data on an ongoing basis as new information becomes available. Any use and/or application of such maps and data is done solely at the user's own risk.



VILLAGE OF BARRINGTON
a great place to live, work and play

US 30 CN/EJ&E Crossing
Lynwood, IL

Village Hall - 200 South Hough Street
Barrington, IL 60010-4399
Phone: 847-304-3400
Hours: Mon - Fri: 8:00 - 4:30
www.barrington-il.gov

RR Crossing

* To be grade-separated

Railroad

8,000 Foot Diameter

X X X Norfolk Southern is abandoning this segment of inactive rail line to accommodate the CN/EJ&E grade separation in Lynwood

ADT Source: IDOT

0 500 1,000 Feet

Projection: State Plane (Illinois East)
Map Units: Feet
Source: VOB GIS, Cook Co., Lake Co.
Date : 11/12/2014

ATTACHMENT D: BARRINGTON TIGER II GRANT APPLICATION

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Project Description

Background

When the federal Surface Transportation Board approved the acquisition of the EJ&E rail line by Canadian National Railway (CN) on December 24, 2008, that decision transformed a rarely used local service rail line into a major Class I international/Intermodal freight superhighway that CN – the only transcontinental Class I railroad network in North America – plans to use to route shipments of Asian goods arriving at the Port of Prince Rupert in Canada down to customers throughout the United States. The EJ&E rail line has existed for 120 years as a local service rail line and the greater Barrington area grew around historically minimal train volumes. At the **height** of its use during World War II, the section of the EJ&E line that bifurcates the center of Barrington carried only nine trains daily. In recent decades, normal train volumes averaged between 3 to 5 low-tonnage trains running through Barrington on a daily basis. With CN's acquisition of the EJ&E, however, train volumes will increase by 676% to a total of a minimum of 20.3 trains daily.

The TIGER II grant project location in this application (U.S. Route 14 /Northwest Highway) is one of four roadways that cross the EJ&E rail line in the Village of Barrington; the others include Hough Street/IL Rte. 59; Lake Cook Road/Main Street; and Lake Zurich Road. The combined projected 2015 ADT of these four roadways crossing the EJ&E is 73,851 cars daily. In addition, the Union Pacific Metra line crossing the EJ&E has a volume of 65 trains running daily carrying 42,900 weekday commuters with approximately 1,800 boarding at the Barrington Metra station. A traffic delay analysis study done in 2008 by CivilTech Engineering (a nationally known civil and transportation engineering consulting firm) on behalf of Barrington conservatively demonstrated that Total Vehicle Traffic delays resulting from CN's operations on the EJ&E will result in vehicle delay increases in a 24-hour period of 1,177% at the project location crossing (U.S. Route 14); 1,156% at the Hough Street/Route 59 crossing; and, 1,150% at the Lake Cook Road/Main Street crossing. (See attached documentation in CivilTech Technical Memo dated December 24, 2008.)

To compound the traffic impacts of this acquisition, the EJ&E crosses the four roads and the Metra/UP commuter rail line – ***at grade level*** – in a span of 5,918 feet within Barrington's village limits. Because the current average length of an Intermodal freight train run by CN ranges from 6,000 to 7,500 feet, it is clear that a single freight train will likely block all four roads and the Metra commuter line running through Barrington on a regular basis, and will increase air pollution as backed up traffic idles waiting for trains to clear up to 25 times daily. These traffic and air pollution impacts will only be compounded as the length of freight trains increases – a real possibility given the fact that the Union Pacific Railroad just "test drove" a 3.5 mile freight train in January of this year, and the reality that there are no laws limiting freight train lengths in the United States.
(http://www.popularmechanics.com/technology/engineering/extreme-machines/4345689)

While the overall traffic traversing the roadways through Barrington was manageable in the region with current road infrastructure prior to CN's acquisition of the EJ&E, the impact of 25 trains randomly interrupting ***all*** traffic flow on a daily basis is a recipe for regional gridlock.

Optimally, it would be best to create a trench for the EJ&E rail line that separates the freight traffic from all four Barrington crossings as well as the Metra commuter line. However, given the $500 million cost of such an immense project, the best solution is not a viable solution to meet the near-term transportation needs of the region. Instead, TIGER II grant request is for creation of an underpass that would allow vehicle traffic on U.S. Route 14 to flow beneath CN's freight trains providing an unimpeded arterial pass-through for vehicular traffic flowing through Barrington.

Because the greater Barrington area has developed with Barrington (incorporated in 1865) serving as the central hub community for the Villages of Lake Barrington, North Barrington, South Barrington, Deer Park, Barrington Hills, Tower Lakes as well as Cuba and Barrington Townships, commuter traffic gridlock is not the only transportation-related challenge in need of remedying through this project. Other challenges include:

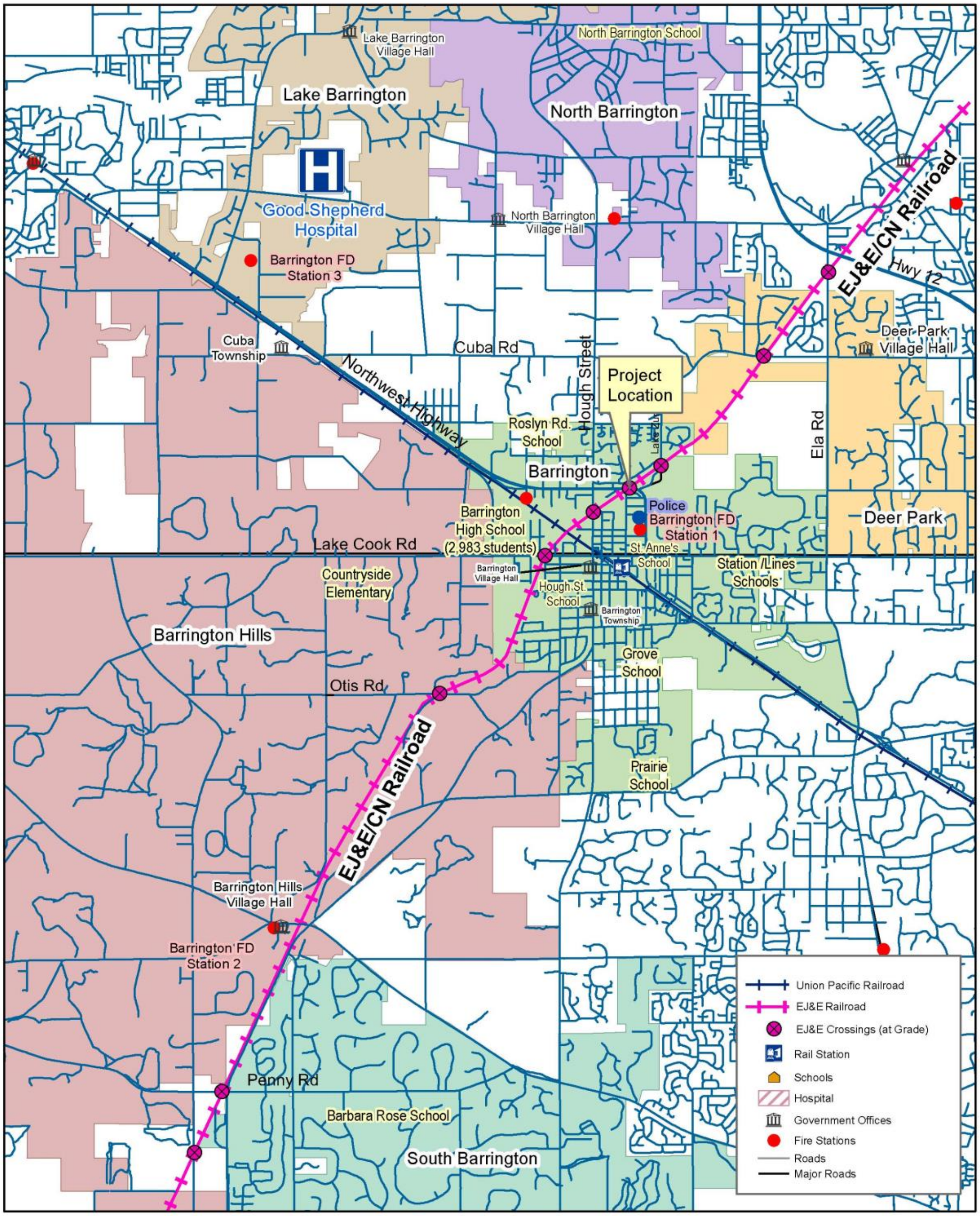
Student Transportation & Safety. The Barrington Community Unit School District 220 was formed in 1973 as a consolidated unit, combining two elementary districts and a high school district into one unit that educates students from pre-kindergarten through high school. It covers 12 villages: all of Barrington, Lake Barrington, Tower Lakes; and portions of Barrington Hills, Carpentersville, Deer Park, Fox River Grove, Port Barrington, Hoffman Estates, Inverness, North Barrington, and South Barrington. In addition, District 220 is geographically located in 4 counties: Cook, Lake, McHenry, and Kane. District 220's 72 square mile service area has one high school, two middle school campuses for grades 6-8, eight elementary schools, and one early childhood center to educate 9,200 students. The school buses serving this student population must cross the EJ&E rail line 840 times per day. Since the CN/EJ&E is only 600 feet to the east of Barrington High School, many of its 3,000 students walk or drive across the line twice daily.

Emergency Response. Barrington's road network configuration, location of its emergency facilities and hospital, and lack of any grade separated crossings on the CN/EJ&E create a public safety threat in terms of reducing the ability of emergency responders (police, fire, and EMS) to reach, serve and transport victims of emergency situations, particularly to the area hospital located west of the EJ&E line, in an expeditious manner. The Barrington Countryside Fire Protection District provides fire protection, emergency treatment, medical transport and other mission-critical services to a 50-square mile area encompassing all of Barrington and portions of Barrington Hills, South Barrington, Lake Barrington, Inverness, as well as portions of unincorporated Lake, Cook, and McHenry Counties. In an emergency response context, the delay of a few seconds or minutes due to blocked crossings on the EJ&E can mean the difference between life and death.

The following two (2) maps of the EJ&E as it runs through Barrington and the area demonstrate that the traffic impacts created by CN's operations on the EJ&E are a major negative factor in terms of regional commuter efficiencies, public safety, environmental sustainability, economic viability, and livability of the northwest region of the greater Chicagoland metro area.

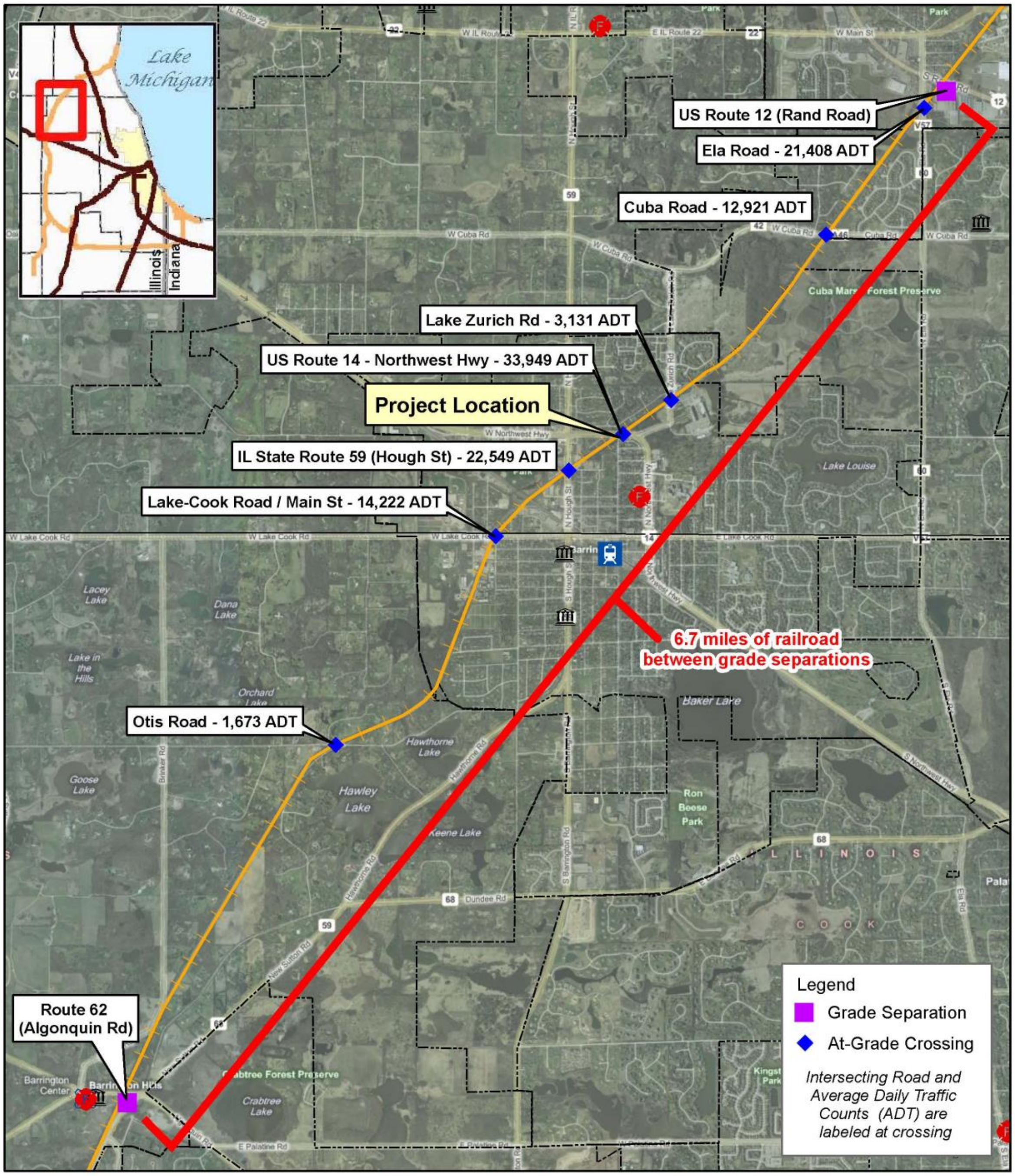
U.S. Route 14 Grade Separation At Canadian National Railroad

EJ&E/CN Crossings



U.S. Route 14 Grade Separation at Canadian National Railroad

Distance between Grade Separations



200 S. Hough St.
Barrington, IL 60010-4399
Phone: 847-304-3400
Fax: 847-381-7506

Projection: State Plane Coordinate System (Illinois East)
Source: Barrington GIS, BAGIS, Cook County and Lake County
Date: August 2010
Prepared by: Village of Barrington Geographic Information Systems

U.S. Route 14 was selected for this grade separation project for a number of reasons:

- It has the highest average daily traffic in Barrington with a 2015 projection of 33,949 ADT; and the second highest ADT of any grade crossing on the entire 198-mile CN/EJ&E rail line.

- ***It is the only U.S. highway crossing the CN/EJ&E rail line that would lack a grade separation once the acquisition's mitigation conditions are completed.***

- Projected vehicle delay increases due to CN's freight traffic were the highest of all four Barrington crossings with a delay increase of 1,177%.

- It is considered a Strategic Regional Arterial (SRA) by the Illinois Department of Transportation intending to function as part of a regional arterial system to carry high volumes of long-distance traffic in conjunction with the other SRA routes and the regional expressway and transit systems.

- It is the only one of the four roadways intersecting with the CN/EJ&E in Barrington that ***does not*** intersect with the UP/Northwest Metra commuter line.

- It is the only one of the four roadways intersecting with the CN/EJ&E in Barrington that has two lanes of traffic in both directions (all the others are single lane roads in each direction.)

- Of the two best options for a grade separation (U.S. Route 14 or Hough Street/IL Route 59), this location would have fewer impacts in terms of the necessity to acquire and demolish existing residential and business properties and was the least expensive grade separation project.

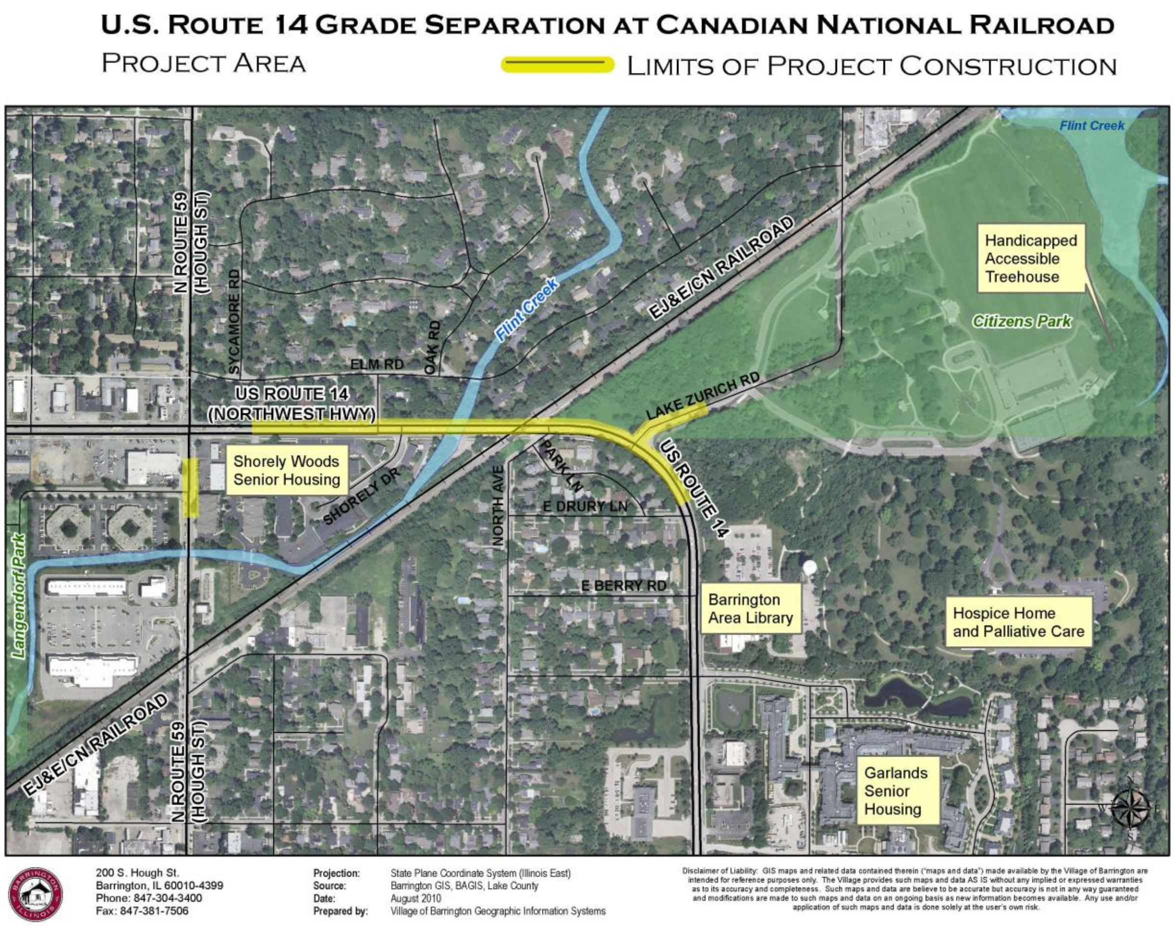
- It would have the broadest right-of-way (ROW) to facilitate the ability of emergency response vehicles to travel as necessary on the roadway's shoulders to navigate through vehicular traffic.

- It is the most direct route for transporting the region's residents located south of the CN/EJ&E to the region's acute care hospital (Advocate Good Shepherd Hospital) with the region's most advanced cardiac care unit and state-of the-art emergency department. Since the Garlands 32-acre retirement community, home to several hundred residents, and Green Castle, the federally subsidized retirement community are both located south of the CN/EJ&E right off of U.S. Route 14, this location would best facilitate rapid transport of elderly patients in need of critical care to the hospital.

- It would provide an alternative routing for certain school buses thus minimizing the routings forced to travel over the CN/EJ&E.
- It would provide unimpeded access for the region's public to the 45-acre Citizens Park that was created in 2007 featuring the only park tree house in Illinois that is fully accessible to disabled persons.

Detail Description

The proposed project will provide the below grade separation of five lanes of US Route 14, as well as the existing pedestrian walkway and bike trail from the EJ&E/CN Railway. To achieve this project a nearby waterway, Flint Creek, will need to be relocated 300 feet further to the west to provide clearance for the highway underpass. Nine private properties would need to be acquired and demolished in order to reroute Flint Creek away from the area of the underpass. A new bridge for the relocated Flint Creek would be required on US Route 14 and on the adjacent Illinois State Route 59. The underpass would be excavated and a new railroad structure constructed. The adjacent intersection of U.S. Route 14 and Illinois Route 59 would be improved to provide for safer and more efficient traffic movements.



Project Parties

1. Village of Barrington, Illinois – Is the grant applicant and the community in which the project will take place.

2. Illinois Department of Transportation – As the transportation agency responsible for U.S. Route 14, IDOT will be the lead in the roadwork and is a contributor of 15% of the project cost.

3. EJ&E/ Canadian National Railroad – Canadian National Railroad (CN), owner of the CN/EJ&E tracks and rail right-of-way will be a contributor and intricately involved in the project which places the roadway under the CN/EJ&E rail line.

Project Funding Sources/ Uses of Funds

Funding Sources

Source	Amount
Federal Government TIGER II	$55,289,110.00
Illinois (State Government)	$10,366,708.00
CN/EJ&E Railroad	$3,455,569.00
Total	**$69,111,387.00**

Project Costs

The cost associated with the three phases of engineering and the costs of construction are listed in the table below:

U.S. Route 14 Construction, Right-of-Way Acquisition and Engineering Cost Estimate

i. Construction Costs

Item No.	Item	Unit	Unit Price	Quantity	Cost
1	5 Lane Roadway - IL Route 59	L.F.	$1,600	200	$320,000
2	2 Lane Roadway	L.F.	$1,000	1,250	$1,250,000
3	5 Lane Roadway/pedestrian walkway/bike path - US 14	L.F.	$1,600	2,000	$3,200,000
4	Retaining Wall	SQFT	$150	50,000	$7,500,000
5	Railroad Structure over US 14	SQFT	$700	6,880	$4,816,000
6	Railroad MOT	L. Sum	$4,000,000	1	$4,000,000
7	Business Acquisition	Each	$1,000,000	2	$2,000,000
8	House Acquisition	Each	$1,000,000	7	$7,000,000

9	Building Removal & Demolition	Each	$100,000	9	$900,000
10	Bridge - IL Route 59 over				
	Relocated Flint Creek	SQFT	$300	4,100	$1,230,000
11	Bridge - US 14 over Relocated				
	Flint Creek	SQFT	$300	5,740	$1,722,000
12	ROW (Lyons Drive)	SQFT	$20	42,000	$840,000
13	Relocation of Flint Creek	L. Sum	$1,000,000	1	$1,000,000
14	Pump Station & Misc Drainage	L. Sum	$5,000,000	1	$5,000,000
15	Roadway MOT	L. Sum	$2,000,000	1	$2,000,000
16	Earth Excavation - Roadway	Cu Yd	$16	96,000	$1,536,000
17	Earth Excavation - Creek	Cu Yd	$16	25,000	$400,000
18	Aggregate Base of Creek	SQ YD	$25	7,500	$187,500
19	Utility Relocation	L. Sum.	$2,500,000	1	$2,500,000
		Construction Sub-Total			$47,401,500
		Contingency (20% of Construction Sub-total)			$9,480,300
		Construction Total			**$56,881,800**

ii. Engineering Costs.

1	Phase I Preliminary Engineering (5% of Construction Total)	$2,844,090
2	Phase II Engineering (6.5% of Construction Total)	$3,697,317
3	Phase III Engineering (10% of Project Sub-Total)	$5,688,180
	Engineering Total	**$12,229,587**
	Project Total	**$69,111,387**

Note: This estimate is subject to revision pending soil boring analysis, detailed geometric studies, and detailed drainage analyses. All unit costs assume 2009 unit prices. Right-of-Way Acquisition services is included in the acquisition cost

Selection Criteria-Long Term Outcomes

1. State of Good Repair

The US Route 14 roadway being excavated and replaced in this project is thirty years old and is near the end of its life cycle. The estimated cost of the replacement of the current roadway in the area of this project is $2,503,600. It is anticipated that the replacement of the current roadway would occur during the start time of this grade separation project. The grade separation project reduces an already anticipated cost for the replacement of the US Route 14. (See effect on the cost of the project in the Discounted Net Benefits from Barrington US Route 14 Grade Separation Project Chart) The newly constructed roadway as part of the underpass will have an expected life of thirty years. The EJ&E/CN railroad structure will have a one hundred year life. The two new bridges for the rerouted Flint Creek (one under US Route 14, one under Illinois State Route 59) will replace older structures and will have thirty year life cycles. The safety improvements (24% crash reduction) and highway efficiency improvements at the intersection of US Route 14 and Illinois State Route 59 will have a fifteen year life cycle.

2. Economic Competitiveness

Alleviating vehicular travel delays would be a critical benefit stemming from the U.S. Route 14 grade separation project. Over a period of half the life cycle of the improvement it would mitigate a delay cost of $142,606,592 (See chart in the Summary Benefit/Cost Analysis).

The arterial roadways that intersect the EJ&E rail line in Barrington are a vital pass-through for commuter traffic that originates in bedroom communities in the northwest area of the greater Chicagoland region and ends at places of employment in downtown Chicago and its near suburbs. A consistent pattern of commuter traffic gridlock (both vehicular and mass transit) at the EJ&E crossings in Barrington impacts not only the livability and viability of the Village itself, but in fact, all the outlying suburban communities located north and northwest of Barrington. Simply put, if people cannot reliably reach work and schools to the southeast of Barrington from their homes north and northwest of Barrington in a timely manner, they are likely to avoid living in those communities. Over time, this will have an immeasurable impact on the ongoing viability, property values, and tax bases of the towns and villages that serve as the northwest regional bedroom communities in the greater Chicagoland area. With a grade separation on the main northwest-southeast arterial spoke running through Barrington, a measure of transit reliability will be restored to the region that was lost when the federal government approved CN's acquisition of the EJ&E.

In April 1993, the Illinois Department of Transportation developed a Strategic Regional Arterial improvement plan (at http://www.cmap.illinois.gov/template.aspx?id=17205) that laid out recommended upgrades to U.S. Route 14 that would maximize its effectiveness as an SRA. Since that time, State of Illinois capital investments have been made to implement the plan. As can be seen in the following chart, U.S. Route 14 is a primary SRA serving the northwest portion of the greater Chicagoland region from Cook County up to the Wisconsin border. Its capacity to serve as a high volume traffic route must be maintained to ensure the current and future economic competitiveness of the communities that grew based on its effectiveness as a transit corridor – a clear benefit that would ensue from a TIGER II grant for a grade separation at the intersection of the CN/EJ&E rail line and U.S. Route 14.

When it comes to the greater Chicagoland metropolitan region, most of the region's recent population and jobs growth has been – and is expected to continue to be – in the collar counties to the west of the EJ&E rail line. Federal funding needs to recognize and respect this growth through vital grade separation projects beyond core Chicago locations. As can be seen in the chart below, significant population growth has occurred in the two counties that rely upon U.S. Route 14 as a transit corridor. By contrast, Cook County (where numerous railroad grade separations already exist) was the only county in the region to decline (-1.7%) in total population since 2000.

Area Population [Sources: U.S. Census Bureau; Chicago Metropolitan Agency for Planning (CMAP)]

Area	1990	2000	1990-2000		2007	2000-2007 # Change	2000-2007 % Change	2030 Forecast
Lake	516,418	644,356	127,938	25%	710,241	656,885	10.22%	841,860
McHenry	183,241	260,077	76,836	42%	315,943	55,866	21.48%	457,594

3. Livability Narrative

Key regional livability benefits would result from the project's funding:

- U.S. Route 14 provides a primary route for reaching the Metra commuter rail station. A large portion of the 1800 daily commuters who board trains in Barrington drive to and park in the Metra lot. If commuters cannot depend upon reaching their commuter trains, they are likely to drive all the way to work rather than rely upon public transit.
- Barrington has long served as a commercial, business, restaurant, entertainment and shopping hub for the surrounding communities of Lake Barrington, North Barrington, Deer Park, South Barrington, Barrington Hills, Tower Lakes, Hoffman Estates, Palatine, Crystal Lake, Fox River Grove, etc. The Village's revitalization efforts over the last two decades – with the involvement and support of these neighboring communities – has focused on growing the Village of Barrington as a "downtown commercial center."

  Barrington itself has a base of 2.7 million square feet of occupied commercial space, including 368 office units. 163 service businesses, 117 retailers, and 40 restaurants. 45% of all occupied commercial space in the Village is located along U.S. Route 14 (Northwest Highway).

  A flow of 25-plus freight trains traveling through the Village on a daily basis creates a logistical "Berlin Wall" absent an unimpeded way to enter and exit the Village Center. Absent the grade separation project, it is expected that urban sprawl will increase on both sides of the track as communities begin developing the commercial resources people can more reliably reach on "their side" of the tracks.

4. Environmental Sustainability

People make decisions on where to live based on many trade-offs, i.e. some people prefer living in a core urban environment while others prefer the characteristics offered in a more suburban and/or rural environment. In the greater Barrington area, one of the environmental characteristics greatly valued in the community is access to green space. In fact, this characteristic is so valued by the community, that in 2002 approximately 10,000 residents of the Village of Barrington and Barrington Township passed a public referendum supporting the expenditure of $11.5 million to acquire the land for development of the 45-acre Citizens Park. Citizens Park is reached off of U.S. Route 14 less than a quarter of a mile southeast of the Tiger II grant application project, so a grade separation that includes a bike path and pedestrian walkway at this key juncture with the CN/EJ&E rail line would do much to support this public investment in environmentally sustainable green space.

This regional community commitment to pristine environments is also a driver in this TIGER II grant application as the benefits of providing an alternative to vehicular traffic gridlock and its accompanying air pollution due to idling cars. According to the Lake County property data found in Barrington's Geographic Information Systems (GIS) there are 195 properties located within a quarter of a mile of the CN/EJ&E and U.S. Route 14 intersection with a fair market value assessment of $94,057,343. Of those properties, 172 properties are residential with a fair market value of $86,831,286. To the extent that this grade separation allows for commuter traffic to flow without idling-induced noxious air emissions, these properties are the prime beneficiaries.

5. Safety

Safety is the primary objective of the applicant in pursuing this road/rail grade separation project. In addition to the reduction in the number of transportation related crashes, injuries, and deaths for drivers and non-drivers (see table below), the project will also allow unimpeded access to the area hospital for injured or critically ill patients saving millions of dollars. (See chart below)

<u>The project will reduce vehicle/ rail crashes at the CN/EJ&E crossing.</u> Using the Illinois Department of Transportation's Bureau of Design Manual pertaining to Expected Crash Frequency at rail crossings, it is possible to determine the safety benefit per year of constructing a grade separation versus maintaining the current crossing.

Expected Crash Frequency (ECF)

Where:	ECF	=	Expected Crash Frequency
	Z	=	Cost of crash = ratio of deaths and injuries per crash (average for latest 3 years in Illinois) x cost per crash (National Safety Council crash cost data which is documented and periodically updated by BDE) = $1,600,000 (2006 Data)
	A	=	Traffic factor (See 7-3A)
	B	=	Component Factor (See 7-3A)
	T	=	Current number of trains per day
	L	=	Cost of grade separation divided by expected life

Step 1: ECF for present installation = A x B x T = (0.034757) x (0.08) x (25 trains per day) = 0.070

Step 2: ECF for proposed installation = A x B x T = 0

Step 3: Savings in ECF per year = Step 1 – Step 2 = 0.070

Step 4: Benefit = Z x Step 3 = (1,600,000) x (0.070) = $112,000 per year*

*This is in current dollars – see chart in Summary Benefit Cost Analysis with 2015 value at $119,818, etc.

A Factors

VEHICLES PER DAY (10-YR. ADT)	FACTOR
250	0.000347
500	0.000694
1000	0.001377
2000	0.002627
3000	0.003981
4000	0.005208
5000	0.006516
6000	0.007720
7000	0.009005
8000	0.010278
9000	0.011435
10000	0.012674
12000	0.015012
14000	0.017315
16000	0.019549
18000	0.021736
20000	0.023877
25000	0.029051
30000	0.034757

B Factors – Basic Values for Existing Devices

Components	**Basic Value Adjustments**
Crossbucks, traffic volume less than 500 vehicles per day	3.89
Crossbucks, urban	3.06
Crossbucks, rural	3.08
Stop signs, traffic volume less than 500 vehicles per day	4.51
Stop signs	1.15
Wigwags	0.61
Flashing lights, urban	0.23
Flashing lights, rural	0.93
Gates, urban	0.08
Gates, rural	0.19

Also, the reduction in crash frequency has an additional safety impact – reduction in the chance of a catastrophic hazmat incident. As we are not privy to how much hazmat material may be on each train determining an exact reduction is difficult. However, knowing that there is a real possibility of hazmat issues (note Rockford, Illinois incident, June 19, 2009) with devastating consequences, a project which separates the train from vehicles has great benefit.

<u>The project will reduce vehicular accidents at the U.S. Route 14 and Illinois Route 59 intersection.</u> The recent AAS HTO Highway Safety Manual (HSM) was utilized to predict the safety benefits of improvements at the intersection of Illinois Route 59 (Hough Street) and U.S. Route 14 (Northwest Highway) which would be within the improvement limits of a grade separation improvement at the CN/EJ&E railway crossing of U.S. Route 14. Noting that the improvement would add dual left turn lanes on Hough Street and right turn lanes on U.S. Route 14 - the HSM methodology predicted a 24% reduction in crashes as a result of such improvements.

The most recent accident data we had available for that intersection was from 2009 where there were 20 total crashes, with 4 that caused personal injury. A 24% reduction would reduce average total crashes by 5 and personal injury crashes by 1 per year as a result of the improvement.

TABLE 1
COMPREHENSIVE COSTS IN POLICE-RELATED CRASHES
BY ABBREVIATED INJUR SCALE (AIS) SEVERITY
(1994 Dollars)

SEVERITY	DESCRIPTOR	COST PER INJURY (DOLLARS)	COST PER INJURY (2015)
AIS 1	Minor	5,000	7,913
AIS 2	Moderate	40,000	63,301
AIS 3	Serious	150,000	237,379
AIS 4	Severe	490,000	775,437
AIS 5	Critical	1,980,000	3,133,398
AIS 6	Fatal	2,600,000	4,114,562

TABLE 2
COMPREHENSIVE COSTS IN POLICE-REPORTED CRASHES
BY K-B-B-C SCALE SEVERITY
(1994 Dollars)

SEVERITY	DESCRIPTOR	COST PER INJURY (DOLLARS)	COST PER INJURY (CURRENT DOLLARS)
K	Fatal	2,600,000	4,114,562
A	Incapacitating	180,000	284,854
B	Evident	36,000	56,971
C	Possible	19,000	30,068
PDO	Property Damage Only	2,000	3,165

Using the current cost amounts, avoiding 5 property damage only crashes would save about $15,825 per year and avoiding one Type B personal injury crash would save about $56,971 per year, or a total annual savings of $72,796.

The project will reduce deaths and more serious complications from injuries or illness by allowing clear access to the area hospital.

The hospital serving the region is located to the northwest of the project area. Since all of the local roadways to the hospital are crossed by the CN/EJ&E at grade, this project would provide unimpeded access to the hospital (U.S. Route 14 is not crossed by the Union Pacific Line). The cost of delay on victims being transported to the hospital can be serious complications, and even death. The emergency physicians at Advocate Good Shepherd Hospital cite a 10% decrease in survivability for every one minute of delay in treating a cardiac victim. Knowing that our traffic modeling analysis (Civiltech Report) showed that for each train event over the crossing a twenty minute delay and dispersal of traffic time would follow it is not unreasonable to determine that with 25 train events per day, there could be 500 minutes (20 minutes x 25 trains) of each day or 8 1/3 hours when vehicles are stopped or slowed, including ambulances on the way to the hospital. Of the 3,208 calls to the area fire/ EMS service each year, approximately 2,000 are for emergency services. Of 1,400 emergency transports per year at least 1,050 are traveling through the U.S. Route 14/ CN/EJ&E intersection. Of these, approximately 10% require advanced life support (105). If during one third of the day, (8 hours, 20 minutes), the ambulance will experience delay, it is reasonable to assume that 35 patients per year will be affected by these delays. From these delays, using the Department of Transportation's $6,000,000 Statistical Value of a Life, the cost of increased morbidity and mortality totals $3,251,250 per year. (See chart in Summary Benefit Cost Analysis)

Clearly, this project greatly enhances the safety of the region, and allows for full utilization of an institution – Advocate Good Shepherd Hospital, with its new coronary care and emergency departments – built through the sweat equity and financial support of the very community which would now be kept from it if this project is not undertaken.

Summary Benefit Cost Analysis

Table 1. Discounted Net Benefits from Barrington US Route 14 Grade Separation Project

Calendar Year	Project Year	Total Value of Reduction In Delays	Total Value of Accidents and Injuries Avoided	Total Value of Fuel Saved	Total Value of Benefits of Project	Grade Separation Project Cost	Discounted Net Benefits 3%
2014	1					$ 66,607,787	$(66,607,787) (1)
2015	2	$ 1,456,146	$ 3,443,864	$ 66,992	$ 4,967,002		4,822,332
2016	3	1,503,287	3,450,063	69,161	5,022,511		4,734,199
2017	4	1,551,961	3,456,273	71,400	5,079,634		4,648,585
2018	5	1,602,216	3,462,494	73,712	5,138,422		4,565,422
2019	6	1,654,103	3,468,727	76,099	5,198,930		4,484,642
2020	7	1,707,677	3,474,971	78,564	5,261,212		4,406,182
2021	8	1,762,993	3,481,226	81,109	5,325,327		4,329,979
2022	9	1,820,106	3,487,492	83,737	5,391,335		4,255,969
2023	10	1,879,077	3,493,769	86,450	5,459,296		4,184,096
2024	11	1,939,965	3,500,058	89,251	5,529,274		4,114,299
2025	12	2,002,833	3,506,358	92,143	5,601,335		4,046,523
2026	13	2,067,746	3,512,670	95,130	5,675,545		3,980,713
2027	14	2,134,771	3,518,992	98,213	5,751,977		3,916,816
2028	15	2,203,976	3,525,327	101,397	5,830,700		3,854,780
2029	16	2,275,434	3,531,672	104,685	5,911,790		3,794,553
2030	17	2,349,216	3,538,029	108,079	5,995,325		3,736,088
2031	18	2,425,401	3,544,398	111,584	6,081,382		3,679,336
2032	19	2,504,065	3,550,777	115,203	6,170,046		3,624,252
2033	20	2,585,291	3,557,169	118,940	6,261,400		3,570,789
2034	21	2,669,161	3,563,572	122,799	6,355,532		3,518,904
2035	22	2,755,763	3,569,986	126,783	6,452,533		3,468,554
2036	23	2,845,186	3,576,412	130,897	6,552,496		3,419,698
2037	24	2,937,523	3,582,850	135,145	6,655,517		3,372,296
2038	25	3,032,867	3,589,299	139,531	6,761,698		3,326,307
2039	26	3,131,319	3,595,760	144,061	6,871,140		3,281,695
2040	27	3,232,980	3,602,232	148,738	6,983,950		3,238,421
2041	28	3,337,954	3,608,716	153,567	7,100,238		3,196,449
2042	29	3,446,351	3,615,212	158,554	7,220,117		3,155,745
2043	30	3,558,283	3,621,719	163,704	7,343,706		3,116,275
2044	31	3,673,865	3,628,238	169,022	7,471,125		3,078,004
2045	32	3,793,217	3,634,769	174,512	7,602,498		3,040,902
2046	33	3,916,463	3,641,312	180,183	7,737,957		3,004,935
2047	34	4,043,730	3,647,866	186,038	7,877,633		2,970,074
2048	35	4,175,150	3,654,432	192,084	8,021,666		2,936,290
2049	36	4,310,860	3,661,010	198,327	8,170,197		2,903,552
2050	37	4,450,999	3,667,600	204,775	8,323,374		2,871,834
2051	38	4,595,715	3,674,202	211,433	8,481,349		2,841,107
2052	39	4,745,156	3,680,815	218,308	8,644,279		2,811,346
2053	40	4,899,478	3,687,441	225,408	8,812,326		2,782,523
2054	41	5,058,841	3,694,078	232,739	8,985,658		2,754,615
2055	42	5,223,410	3,700,727	240,311	9,164,448		2,727,596
2056	43	5,393,358	3,707,389	248,129	9,348,876		2,701,444
2057	44	5,568,859	3,714,062	256,203	9,539,125		2,676,134
2058	45	5,750,098	3,720,747	264,542	9,735,387		2,651,645
2059	46	5,937,262	3,727,445	273,152	9,937,859		2,627,954
2060	47	6,130,546	3,734,154	282,045	10,146,744		2,605,040
2061	48	6,330,151	3,740,875	291,228	10,362,255		2,582,883
2062	49	6,536,286	3,747,609	300,711	10,584,607		2,561,462
2063	50	6,749,165	3,754,355	310,505	10,814,025		2,540,758
	Totals	169,656,261	176,249,210	7,805,283	353,710,754	66,607,787	100,906,210

Net Present Value:	100,906,210
Ratio of Benefit to Cost:	2.51

(1) Project cost of $69,111,387 is reduced by $2,503,600 for cost of reconstructing US Rt 14 that would need to occur regardless of grade separation project.

Table 2. Value of Delay Mitigation from Barrington US Route 14 Grade Separation Project

Year	Average Daily Traffic US Rte 14	Number of Train Events Per Day	Number of Delayed Vehicles Per Day	Reduction in Hours of Delay Per Day	Reduction in Hours of Delay Per Year	Value of Time Saved Per Hour of Delay	Annual Value of Reductions in Delays
2015	33,662	25	1,245	249	90,885	$ 13.70	$ 1,245,125
2016	33,723	25	1,248	249	91,049	14.11	1,284,787
2017	33,783	25	1,250	250	91,212	14.53	1,325,712
2018	33,844	25	1,252	250	91,377	14.97	1,367,942
2019	33,905	25	1,254	251	91,541	15.42	1,411,516
2020	33,966	25	1,257	251	91,706	15.88	1,456,478
2021	34,027	25	1,259	252	91,871	16.36	1,502,873
2022	34,088	25	1,261	252	92,036	16.85	1,550,746
2023	34,150	25	1,264	253	92,202	17.35	1,600,143
2024	34,211	25	1,266	253	92,368	17.88	1,651,114
2025	34,273	25	1,268	254	92,534	18.41	1,703,709
2026	34,335	25	1,270	254	92,701	18.96	1,757,978
2027	34,396	25	1,273	254	92,868	19.53	1,813,977
2028	34,458	25	1,275	255	93,035	20.12	1,871,760
2029	34,520	25	1,277	255	93,202	20.72	1,931,383
2030	34,582	25	1,280	256	93,370	21.34	1,992,905
2031	34,645	25	1,282	256	93,538	21.98	2,056,387
2032	34,707	25	1,284	257	93,706	22.64	2,121,891
2033	34,769	25	1,286	257	93,875	23.32	2,189,482
2034	34,832	25	1,289	258	94,044	24.02	2,259,225
2035	34,895	25	1,291	258	94,213	24.74	2,331,191
2036	34,958	25	1,293	259	94,383	25.49	2,405,449
2037	35,021	25	1,296	259	94,553	26.25	2,482,072
2038	35,084	25	1,298	260	94,723	27.04	2,561,136
2039	35,147	25	1,300	260	94,894	27.85	2,642,718
2040	35,210	25	1,303	260	95,064	28.68	2,726,899
2041	35,273	25	1,305	261	95,236	29.55	2,813,762
2042	35,337	25	1,307	261	95,407	30.43	2,903,391
2043	35,400	25	1,310	262	95,579	31.34	2,995,876
2044	35,464	25	1,312	262	95,751	32.28	3,091,307
2045	35,528	25	1,315	263	95,923	33.25	3,189,777
2046	35,592	25	1,317	263	96,096	34.25	3,291,384
2047	35,656	25	1,319	264	96,269	35.28	3,396,228
2048	35,720	25	1,322	264	96,442	36.34	3,504,411
2049	35,784	25	1,324	265	96,616	37.43	3,616,041
2050	35,849	25	1,326	265	96,789	38.55	3,731,226
2051	35,913	25	1,329	266	96,964	39.71	3,850,081
2052	35,978	25	1,331	266	97,138	40.90	3,972,721
2053	36,043	25	1,334	267	97,313	42.12	4,099,268
2054	36,108	25	1,336	267	97,488	43.39	4,229,847
2055	36,173	25	1,338	268	97,664	44.69	4,364,584
2056	36,238	25	1,341	268	97,840	46.03	4,503,614
2057	36,303	25	1,343	269	98,016	47.41	4,647,072
2058	36,368	25	1,346	269	98,192	48.83	4,795,099
2059	36,434	25	1,348	270	98,369	50.30	4,947,843
2060	36,499	25	1,350	270	98,546	51.81	5,105,451
2061	36,565	25	1,353	270	98,723	53.36	5,268,080
2062	36,631	25	1,355	271	98,901	54.96	5,435,890
2063	36,697	25	1,358	271	99,079	56.61	5,609,044
						Total Value of Delay Mitigation	$ 142,606,592

Table 3. Value of Delay Mitigation due to Traffic Diversion as a Result of Barrington US Route 14 Grade Separation Project

Year	Average Daily Traffic Illinois Rt 59	Average Daily Traffic Lake-Cook Rd	Number of Train Events Per Day	Number of Vehicles Diverted to US Rt 14	Reduction in Hours of Delay Per Day	Reduction in Hours of Delay Per Year	Value of Time Saved Per Hour of Delay	Annual Value of Reductions in Delays
2015	24,056	14,222	25	283	42	15,403	$ 13.70	$ 211,021
2016	24,116	14,364	25	285	42	15,484	14.11	218,501
2017	24,176	14,508	25	286	43	15,566	14.53	226,249
2018	24,237	14,653	25	288	43	15,649	14.97	234,274
2019	24,297	14,799	25	289	43	15,733	15.42	242,587
2020	24,358	14,947	25	291	43	15,817	15.88	251,199
2021	24,419	15,097	25	292	44	15,901	16.36	260,120
2022	24,480	15,248	25	294	44	15,987	16.85	269,361
2023	24,541	15,400	25	296	44	16,072	17.35	278,934
2024	24,603	15,554	25	297	44	16,159	17.88	288,851
2025	24,664	15,710	25	299	45	16,246	18.41	299,125
2026	24,726	15,867	25	300	45	16,335	18.96	309,768
2027	24,788	16,026	25	302	45	16,423	19.53	320,794
2028	24,850	16,186	25	304	45	16,513	20.12	332,217
2029	24,912	16,348	25	305	45	16,603	20.72	344,051
2030	24,974	16,511	25	307	46	16,694	21.34	356,312
2031	25,036	16,676	25	309	46	16,785	21.98	369,014
2032	25,099	16,843	25	310	46	16,877	22.64	382,174
2033	25,162	17,012	25	312	46	16,971	23.32	395,809
2034	25,225	17,182	25	314	47	17,064	24.02	409,936
2035	25,288	17,354	25	316	47	17,159	24.74	424,573
2036	25,351	17,527	25	317	47	17,254	25.49	439,738
2037	25,414	17,702	25	319	48	17,350	26.25	455,451
2038	25,478	17,879	25	321	48	17,447	27.04	471,732
2039	25,542	18,058	25	323	48	17,544	27.85	488,601
2040	25,605	18,239	25	324	48	17,643	28.68	506,081
2041	25,669	18,421	25	326	49	17,742	29.55	524,192
2042	25,734	18,605	25	328	49	17,842	30.43	542,960
2043	25,798	18,791	25	330	49	17,943	31.34	562,407
2044	25,862	18,979	25	332	49	18,044	32.28	582,558
2045	25,927	19,169	25	334	50	18,147	33.25	603,440
2046	25,992	19,361	25	336	50	18,250	34.25	625,078
2047	26,057	19,554	25	338	50	18,354	35.28	647,502
2048	26,122	19,750	25	339	51	18,459	36.34	670,738
2049	26,187	19,947	25	341	51	18,565	37.43	694,819
2050	26,253	20,147	25	343	51	18,671	38.55	719,773
2051	26,319	20,348	25	345	51	18,779	39.71	745,634
2052	26,384	20,552	25	347	52	18,887	40.90	772,434
2053	26,450	20,757	25	349	52	18,996	42.12	800,209
2054	26,516	20,965	25	351	52	19,106	43.39	828,994
2055	26,583	21,175	25	353	53	19,217	44.69	858,826
2056	26,649	21,386	25	355	53	19,329	46.03	889,744
2057	26,716	21,600	25	358	53	19,442	47.41	921,788
2058	26,783	21,816	25	360	54	19,556	48.83	954,998
2059	26,849	22,034	25	362	54	19,671	50.30	989,419
2060	26,917	22,255	25	364	54	19,786	51.81	1,025,095
2061	26,984	22,477	25	366	55	19,903	53.36	1,062,071
2062	27,051	22,702	25	368	55	20,021	54.96	1,100,397
2063	27,119	22,929	25	370	55	20,139	56.61	1,140,121
							Total Value of Delay Mitigation	$ 27,049,668

Table 4. Value of Accidents and Injuries Avoided by Construction of Barrington US Route 14 Grade Separation

Year	US Rte 14	Number of Train Events Per Day	Reduction in Cost of Expected Vehicle-Rail Accidents	Reduction in Cost of Expected Vehicle-Vehicle Accidents	Reduction in Cost of Injury due to Delays in EMS Transport	
2015	33,662	25	$ 119,818	$ 72,796	$ 3,251,250	$ 3,443,864
2016	33,723	25	120,034	72,927	3,257,102	3,450,063
2017	33,783	25	120,250	73,058	3,262,965	3,456,273
2018	33,844	25	120,466	73,190	3,268,838	3,462,494
2019	33,905	25	120,683	73,322	3,274,722	3,468,727
2020	33,966	25	120,900	73,454	3,280,617	3,474,971
2021	34,027	25	121,118	73,586	3,286,522	3,481,226
2022	34,088	25	121,336	73,718	3,292,438	3,487,492
2023	34,150	25	121,554	73,851	3,298,364	3,493,769
2024	34,211	25	121,773	73,984	3,304,301	3,500,058
2025	34,273	25	121,992	74,117	3,310,249	3,506,358
2026	34,335	25	122,212	74,250	3,316,207	3,512,670
2027	34,396	25	122,432	74,384	3,322,176	3,518,992
2028	34,458	25	122,652	74,518	3,328,156	3,525,327
2029	34,520	25	122,873	74,652	3,334,147	3,531,672
2030	34,582	25	123,094	74,786	3,340,148	3,538,029
2031	34,645	25	123,316	74,921	3,346,161	3,544,398
2032	34,707	25	123,538	75,056	3,352,184	3,550,777
2033	34,769	25	123,760	75,191	3,358,218	3,557,169
2034	34,832	25	123,983	75,326	3,364,263	3,563,572
2035	34,895	25	124,206	75,462	3,370,318	3,569,986
2036	34,958	25	124,430	75,598	3,376,385	3,576,412
2037	35,021	25	124,654	75,734	3,382,462	3,582,850
2038	35,084	25	124,878	75,870	3,388,551	3,589,299
2039	35,147	25	125,103	76,007	3,394,650	3,595,760
2040	35,210	25	125,328	76,144	3,400,761	3,602,232
2041	35,273	25	125,553	76,281	3,406,882	3,608,716
2042	35,337	25	125,779	76,418	3,413,014	3,615,212
2043	35,400	25	126,006	76,555	3,419,158	3,621,719
2044	35,464	25	126,233	76,693	3,425,312	3,628,238
2045	35,528	25	126,460	76,831	3,431,478	3,634,769
2046	35,592	25	126,688	76,970	3,437,654	3,641,312
2047	35,656	25	126,916	77,108	3,443,842	3,647,866
2048	35,720	25	127,144	77,247	3,450,041	3,654,432
2049	35,784	25	127,373	77,386	3,456,251	3,661,010
2050	35,849	25	127,602	77,525	3,462,472	3,667,600
2051	35,913	25	127,832	77,665	3,468,705	3,674,202
2052	35,978	25	128,062	77,805	3,474,949	3,680,815
2053	36,043	25	128,292	77,945	3,481,203	3,687,441
2054	36,108	25	128,523	78,085	3,487,470	3,694,078
2055	36,173	25	128,755	78,226	3,493,747	3,700,727
2056	36,238	25	128,986	78,366	3,500,036	3,707,389
2057	36,303	25	129,219	78,507	3,506,336	3,714,062
2058	36,368	25	129,451	78,649	3,512,647	3,720,747
2059	36,434	25	129,684	78,790	3,518,970	3,727,445
2060	36,499	25	129,918	78,932	3,525,304	3,734,154
2061	36,565	25	130,152	79,074	3,531,650	3,740,875
2062	36,631	25	130,386	79,217	3,538,007	3,747,609
2063	36,697	25	130,621	79,359	3,544,375	3,754,355
					Total Value of Accidents and Injuries Avoided:	$ 176,249,210

Table 5. Fuel Savings from Barrington US Route 14 Grade Separation Project

Year	Hours of Delay Per Day	Daily Fuel Consumption in Gallons	Annual Gallons of Fuel Consumed	Cost of Fuel	Cost of Reduction in Fuel Consumption
2015	291	64.4	23,506	$ 2.85	$ 66,992
2016	292	64.5	23,560	2.94	69,161
2017	293	64.7	23,615	3.02	71,400
2018	293	64.8	23,669	3.11	73,712
2019	294	65.0	23,724	3.21	76,099
2020	295	65.1	23,779	3.30	78,564
2021	295	65.3	23,834	3.40	81,109
2022	296	65.5	23,890	3.51	83,737
2023	297	65.6	23,945	3.61	86,450
2024	297	65.8	24,001	3.72	89,251
2025	298	65.9	24,057	3.83	92,143
2026	299	66.1	24,114	3.95	95,130
2027	299	66.2	24,170	4.06	98,213
2028	300	66.4	24,227	4.19	101,397
2029	301	66.5	24,284	4.31	104,685
2030	302	66.7	24,341	4.44	108,079
2031	302	66.8	24,398	4.57	111,584
2032	303	67.0	24,456	4.71	115,203
2033	304	67.2	24,514	4.85	118,940
2034	304	67.3	24,572	5.00	122,799
2035	305	67.5	24,630	5.15	126,783
2036	306	67.6	24,689	5.30	130,897
2037	307	67.8	24,748	5.46	135,145
2038	307	68.0	24,807	5.62	139,531
2039	308	68.1	24,866	5.79	144,061
2040	309	68.3	24,926	5.97	148,738
2041	310	68.5	24,985	6.15	153,567
2042	310	68.6	25,045	6.33	158,554
2043	311	68.8	25,106	6.52	163,704
2044	312	68.9	25,166	6.72	169,022
2045	313	69.1	25,227	6.92	174,512
2046	313	69.3	25,288	7.13	180,183
2047	314	69.4	25,349	7.34	186,038
2048	315	69.6	25,411	7.56	192,084
2049	316	69.8	25,473	7.79	198,327
2050	316	70.0	25,535	8.02	204,775
2051	317	70.1	25,597	8.26	211,433
2052	318	70.3	25,659	8.51	218,308
2053	319	70.5	25,722	8.76	225,408
2054	319	70.6	25,785	9.03	232,739
2055	320	70.8	25,849	9.30	240,311
2056	321	71.0	25,912	9.58	248,129
2057	322	71.2	25,976	9.86	256,203
2058	323	71.3	26,040	10.16	264,542
2059	323	71.5	26,105	10.46	273,152
2060	324	71.7	26,170	10.78	282,045
2061	325	71.9	26,235	11.10	291,228
2062	326	72.1	26,300	11.43	300,711
2063	327	72.2	26,366	11.78	310,505

Total Gallons of Fuel Consumed: 1,219,623

Total Cost of Additional Fuel Consumed in Constant 2010 Dollars: $ 7,805,283

(2) Fuel Cost for 2010 is based on a blended average cost of Gasoline and Diesel Fuel. The dollar cost is then adjusted for inflation at 3% rate (equal to the discount rate that should be used for Governments as recommended by the Federal Register).

Table #6. Calculation of Additional Mortality and Morbidity due to EMS Transport Delays

Average Annual EMS Calls	2,000
Number of EMS Calls in Area Separated from Hospital by EJ&E Railroad (70%)	1,400
Number of EMS Calls in Separated Area Requiring Transport (75%)	1,050
Number of EMS Calls in Separated Area Requiring Advanced Life Support (ALS) (10%)	105
Number of EMS-ALS Calls in Separated Area Potentially Impacted by Train Delays (33%)	35
Statistical Value of Life	$ 6,000,000
Statistical Value of Critical Injury	4,575,000
Statistical Value of Severe Injury	1,125,000
Statistical Value of Serious Injury	345,000

Estimated Increase in Annual Mortality/Morbidity Caused by Delays at EJ&E Crossings

	Number	Cost
Mortality	0.20	$ 1,200,000
Morbidity		
Critical	0.25	1,143,750
Severe	0.50	562,500
Serious	1.00	345,000
Calculated Mortality/Morbidity:		**3,251,250**

Job Creation and Economic Stimulus

In the short-term, this grade separation project will require/ create an estimated 640 jobs – 130 engineering and 510 in construction. As indicated in the "Project Readiness" tables below, the engineering work would commence immediately, and the construction jobs would be underway within two years. The number of jobs estimated is based on construction industry standards for jobs created per dollars to be spent (for every $92,000 spent, one construction job is created).

Over the long-term – as mentioned previously, the project improvement is important in preserving Barrington and the larger region as a viable place of employment by allowing cost effective travel to and from employment and for commercial purposes.

Project Readiness/ NEPA

i. Project Schedule

Project Phase	Completion Date
Phase 1 Studies (including all NEPA Review)	Complete by June 30, 2012
Phase 2 Studies and Right-of-Way acquisitions	Complete by September 2013
Construction	Complete by September 2015

ii. Environmental Approvals

The project which is the subject of this funding request – a grade separation (road underpass) at U.S. Route 14 and the CN/EJ&E railroad intersection in Barrington, Illinois – has become a necessity because of the approval on December 24, 2008 of the Canadian National Railroad's purchase of the EJ&E line and plan to dramatically increase freight traffic on the line. Without the increase in the freight traffic, this project would not have been requested. Further, without federal funding for this project (TIGER II) it cannot be funded at this time and thus no NEPA study to evaluate this project has even begun. However, knowing that in less than one year, the federal Surface Transportation Board was able to complete an Environmental Impact Study for CN's purchase of the EJ&E Railroad (www.stb.dot.gov), (a study which spanned 198 miles in Northern Illinois affecting several million people) we are sure that the NEPA review required for this grade separation project can be completed expeditiously.

The project schedule calls for the NEPA review to be complete by June 30, 2012 – again, almost two years from now. The high profile CN acquisition of the EJ&E and the similarly lengthy and publicly engaged EIS process, received a great deal of attention from the residents and agencies of this area – the same residents and federal and state agencies which would be involved in the NEPA process for this grade separation project. Comments from the public in the NEPA process for the CN acquisition called for this sort of mitigation – a grade separation at U.S. Route 14 – so wide public and agency support for the grade separation project would be expected during NEPA and agency approvals.

The level of NEPA review expected would be at the level of an Environmental Assessment. While the road project itself would probably have received a Categorical Exclusion (CE), the movement of the Flint Creek to the west to facilitate the project will require an Environmental Assessment. The Flint Creek had been moved one other time, several years ago. That fact, plus the knowledge that this project will be an overall positive for the environment (less risk of hazmat spills with Creek further from the train) and is responsible for environmental mitigation for the increased train traffic should help the process go very smoothly.

The agencies which will be involved in NEPA review and approvals for the project should include: the Illinois Department of Transportation (IDOT), the Army Corps of Engineers, the U.S. Fish and Wildlife Service, the U.S. Environmental Protection Agency, and the Illinois Environmental Protection Agency. Most of these agencies, and the applicant for this project were parties involved in the NEPA review for the EJ&E Railroad acquisition. We do not anticipate any problem in working with them, as we have on other projects in our Village and area.

iii. Legislative Approvals

No state or local approval required. See letters of support in Appendix from other local government officials supporting mitigation/ grade separation for U.S. Route 14.

iv. State and Local Planning

See the attached letter from the Chicago and Metropolitan Agency for Planning (CMAP), our MPO, in support of this project.

v. Technical Feasibility

The project has been reviewed in terms of initial engineering/ technical feasibility by CivilTech Engineers, a recognized, licensed, professional firm with many years experience on Illinois transportation projects.

vi. Financial Feasibility

As indicated in the Project Funding section, if 80% funding is received from a TIGER Grant, the balance of funding will come from the Illinois Department of Transportation (IDOT) and the Canadian National Railroad (required railroad share of a grade separation project).

Secondary Selection Criteria

Innovation

In recent years, the traffic signalization on U.S. Route 14 has been interconnected (IDOT Traffic Signal Interconnect Project), improving traffic flow for many miles through several communities.

An even newer program to assist traffic flow may soon be available. Lake County PASSAGE is an intelligent transportation system designed to provide motorists real time traffic congestion information due to abnormal traffic volumes, crashes and construction events. These events are communicated through intersection camera data, the police department's computer aided dispatch system, and motorist reported events. This information is then communicated back to highway users via www.lakecountypassage.com, PASSAGE Highway Advisory Radio 1620 AM, Lake County Television Channel 18, variable message signs, and can even be used to remotely adjust signal timing from the Lake County PASSAGE offices. Lake County is currently exploring opportunities to expand the system to cover the Lake County portion of Barrington.

PASSAGE shares data with the Illinois Department of Transportation, the Illinois Tollway, and many other local agencies to provide drivers with as much information as possible to make good planning and driving decisions. This communication and data exchange helps PASSAGE and the other agencies provide coverage to all of Lake County. PASSAGE also exchanges information with the Gary-Chicago-Milwaukee (GCM) Corridor program, which provides information on the major tollways and expressways serving the region.

Partnership

This project is not one that could be completed without several crucial partnerships. From a financial standpoint, the funding to be provided the federal government is essential, as the local government, and state government at this time and for the foreseeable future, could not fund this project. The railroad, under existing rules for grade separation funding will also contribute to project costs with the state and local governments.

This project, while being requested by our Village, represents a culmination of collaboration by many affected local governments in northeastern Illinois who will benefit from increased accessibility (See map of project area and Congressional district maps.) The project enjoys support from the many individuals, businesses, and other local governments – schools, park, library, environmental groups – and other organizations which testified and wrote in support of mitigation from the effects of increased freight traffic on the EJ&E line. At the eight public meetings held in August 2008 by the Surface Transportation Board (STB) on CN's acquisition of the EJ&E, 4,645 people attended and 305 spoke from throughout the region. Of that overall group, 3,000 of the attendees or 65% attended the Barrington public meeting, and 69 or 23% of speakers were at the Barrington meeting. Traffic delays and gridlock were the primary topic of the public input received by the STB.

Our area communities, as well as those in the greater northern Illinois region, have worked with our Congressional representatives to promote this project and others to relieve the impact of increased freight congestion on our communities, as the multi-state area and nation addresses the same freight "decongestion" issue. This project, as part of a broader group, which addresses freight congestion relief, are considered by our Congressional delegation and others on the House Transportation and Infrastructure Committee to address issues of national/ regional significance.

Conclusion

The proposed project is critical to the productivity, livability, sustainability, and safety of the lives of the thousands of people living in our region. On a national basis, it furthers the co-existence of community living, including the use of commuter transit, with the movement of freight to serve the nation's needs. We hope to partner with the Department of Transportation as a successful recipient of a TIGER II grant to make this project a reality.

Before the

SURFACE TRANSPORTATION BOARD

Finance Docket No. 35087

CANADIAN NATIONAL RAILWAY COMPANY AND GRAND TRUNK CORPORATION – CONTROL – E J & E WEST COMPANY

VERIFIED STATEMENT OF KAREN LAMBERT

My name is Karen Lambert and I am the President of Advocate Good Shepherd Hospital located at 450 West Highway 22 in Lake Barrington, Illinois. I've held this position at the hospital for 13 years. With more than 700 primary care and specialty physicians, the hospital provides a comprehensive range of services at our 169-bed facility. We have won the Gold-level Beacon Award recognizing high quality outcomes for Intensive Care Services and have been recognized as one of the nation's 50 Top Cardiovascular Hospitals by Truven Health Analytics for the second consecutive year. Our state-of the-art cardiac care unit was opened in 2005 and offers a universal care model which is unique in the area.

Good Shepherd is an Illinois-designated Level II Trauma Center with a pediatric treatment area and Illinois state EDAP (Emergency Department Approved for Pediatrics) designation in a 56,000 sq. ft. facility. Seventy-five percent of the patients who arrive in our emergency room by ambulance are admitted for in-patient treatment. Advocate Good Shepherd Hospital's Emergency Department is staffed by highly experienced physicians, with many having served previously in major metropolitan trauma centers. Together with ER/Trauma specialty-certified staff, they treat approximately 35,000 patients a year. All physicians are board-certified emergency medicine specialists, and our surgeons are board-certified surgical specialists.

Our Emergency Department Cardiac Alert protocol saves lives and is part of the region's most sophisticated cardiac unit available to patients. Good Shepherd paid for and deployed a wireless remote 12-lead electrocardiogram system with all area first-responders. If arriving by ambulance, paramedics communicate the patient's symptoms directly to our Emergency Department via radio communication and remotely transmit the real-time EKG read-outs back to the ER staff. While the ambulance is in route, the cardiac alert team assembles and prepares to receive the patient at the door with all necessary medications and equipment. For these cardiovascular patients, every minute counts. Chance of survival for a cardiac patient decreases by 10% for every minute of delay in receiving the care that only can be accessed in the hospital setting. Due to this collaboration with our EMS partners, we consistently achieve times significantly better than the national 90 minute standard for patients coming into the Emergency Department and requiring cardiac intervention.

To illustrate the importance of our proximity to emergency cardiac patients, if a resident of one of the two senior residential facilities located on U.S. Highway 14 ***just 1516 feet*** from the EJ&E/U.S. Highway 14 crossing has a heart attack, he would normally be transported by ambulance to the fully prepared medical team at Advocate Good Shepherd within five minutes because it's located less than three miles away.

We have been accredited since 2010 as a Primary Stroke Center, most recently in 2012 by DNV Healthcare Inc. According to the National Stroke Association, stroke accounts for more than one out of every 15 deaths in the United States. Time-to-treatment is no less critical for the stroke patient than the cardiac case. Like the Cardiac Alert team, Good Shepherd's Stroke Alert program is based on clinical best practice guidelines to manage and optimize stroke patient care to save vital brain function. We recently achieved the American Hospital Association Gold Plus award for Stroke Care.

For all emergencies, our emergency department – updated in 2007 – is literally a lifeline in our region's health care coverage. This is particularly true of our senior population, which accounts for 40% of Barrington's EMS calls according to the Barrington Fire Department. Because elapsed time is a critical factor in the success of emergency response to a medical crisis, I fully understand the need to build a grade separation at U.S. Highway 14 where it meets the EJ&E rail line – most especially because that is the most direct route to the hospital from downtown Barrington and it doesn't cross the UP Metra commuter line.

Quick access to emergency hospital care is a necessity for all the residents of the Barrington area communities and the larger hospital service area that draws numerous patients living on "the wrong side" of the EJ&E who can be blocked by a train at all four Barrington crossings simultaneously – even if the train is moving. The hospital's service area encompasses many communities on the wrong side of the EJ&E -- most immediately, all or parts of the Villages of Barrington, Barrington Hills, Deer Park, South Barrington, and Inverness. Good Shepherd was built, and has experienced rapid expansion, to serve the hospital needs of the people living in these communities.

VERIFICATION

I, Karen Lambert, declare under penalty of perjury that the foregoing is true and correct. Further, I certify that I am qualified and authorized to file this Verified Statement.

Executed on November 19, 2014.

Karen Lambert

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Karen Lambert

ATTACHMENT F TO MAYOR KAREN DARCH VERIFIED STATEMENT – CN EMAILS

APRIL 5, 2013 EMAIL:

From: Patrick Jones
To: Joseph J. Emry, P.E.; Kriks, Aren; Patel, Ojas N; Gregory E. Summers AICP (gsummers@barrington-il.gov); andy.rabadi@illinois.gov
Cc: Gregory J. Hatlestad, P.E., S.E.; Robert J. Andres, P.E., PTOE; Fountain, James; Czaplicki, Sarah
Subject: RE: U.S. Route 14/CN - CN coordination meeting minutes
Date: Friday, April 05, 2013 2:44:23 PM

Joseph,
CN engineering offers the following comments to the meeting minutes:
1) First line should be: US Route 14 Grade Separation at CN/**WCL**. This should be changed at the top of every page as well.
2) Second line should be: Kick-off meeting with CN. Delete Railway.
3) Third paragraph from bottom on page 2, last sentence should change to: The CN replied that track time closures would need to be coordinated with their operating department, but lengthy track outages would be unlikely.
4) Last paragraph on page 2, first bullet, change to: The CN stated that they have no current plans to add a second track in this area; *however, after the meeting, CN confirmed that a second track in this area would be consistent with other double-tracking projects completed and planned since CN's takeover of the former EJE.*
If you have any further questions please call.
Thanks,

Patrick Jones
CN - Manager Public Works
17641 South Ashland Avenue
Homewood, IL 60430
(o) 708.332.3557
(e) Patrick.Jones@cn.ca

From: Joseph J. Emry, P.E. [mailto:JEmry@civiltechinc.com]
Sent: Wednesday, April 03, 2013 10:46 AM
To: Kriks, Aren; Patel, Ojas N; Gregory E. Summers AICP (gsummers@barrington-il.gov); andy.rabadi@illinois.gov; Patrick Jones
Cc: Gregory J. Hatlestad, P.E., S.E.; Robert J. Andres, P.E., PTOE; Fountain, James; Czaplicki, Sarah
Subject: RE: U.S. Route 14/CN - CN coordination meeting minutes

All,
Attached are the minutes from the coordination meeting held on Friday, March 22 between the CN Railway, Village of Barrington, and IDOT. The previously sent draft minutes have been revised to address IDOT comments, including a discussion of potential countermeasures for vehicle queues through the crossing during construction. Thank you.
Joe

From: Joseph J. Emry, P.E.
Sent: Monday, April 01, 2013 9:40 AM
To: Kriks, Aren; 'Patel, Ojas N'; Gregory E. Summers AICP (gsummers@barrington-il.gov)
Cc: Gregory J. Hatlestad, P.E., S.E.; Robert J. Andres, P.E., PTOE; Fountain, James; 'Czaplicki, Sarah'
Subject: U.S. Route 14/CN - CN coordination meeting minutes

Attached are the draft minutes from the coordination meeting with CN Railway on Friday, March 22.
Please review and let me know if you have any comments or corrections. Thank you.
Joe Emry

Joseph J. Emry, P.E.
Project Manager | jemry@civiltechinc.com
Civiltech Engineering, Inc.
450 E. Devon Ave, Suite 300 | Itasca, IL 60143
Direct: 630.735.3955 | Fax: 630.773.3975
www.civiltechinc.com

FEBRUARY 5, 2014 EMAIL:

From: Patrick Jones
To: Joseph J. Emry, P.E.
Subject: RE: US 14 grade separation at CN/WCL
Date: Wednesday, February 05, 2014 3:31:57 PM

Joe,
We have performed a cursory review of the shoo fly alignment and at this stage see no issues. The curves and curve spirals will need to be reviewed in greater detail. What is the status or plans for the possible temporary crossing at sta. 13+23.95? We will be curious to see the proposed final alignment and grade. We are considering the idea to have the second abutment constructed as part of this project and with the superstructure to come at a later date. We would need to look into the track spacing a bit more. It appears that the shoo fly will be constructed from approximately sta. 2+00 up to station 26+00? Our structure folks still think the abutments can and should be conventional concrete abutments (on piles) over proposed steel sheet pile wall with tie backs primarily due potential anchor failures. We believe that the conventional concrete abutments(on piles) are constructible with constraints noted here. The skew should be discussed further.
We are open to a call to discuss the project and our structure folks can be involved to discuss the abutments or any other structure questions. I'm pretty much open on the week of February 24th to discuss on a conference call. Please let me know your availability.
Thanks,

Patrick Jones
CN - Manager Public Works
17641 South Ashland Avenue
Homewood, IL 60430
(o) 708.332.3557
(e) patrick.jones@cn.ca

From: Joseph J. Emry, P.E. [mailto:JEmry@civiltechinc.com]
Sent: Wednesday, December 11, 2013 1:51 PM
To: Patrick Jones
Cc: Summers, Greg; andy.rabadi@illinois.gov; Baniewicz, Thomas E.; Kangrga, Dusanka; Czaplicki, Sarah; Niemeyer, Ted; Gregory J. Hatlestad, P.E., S.E.; Robert J. Andres, P.E., PTOE
Subject: US 14 grade separation at CN/WCL

Pat,
We have reached a preferred alternative for the grade separation at U.S. Route 14 and the CN's WCL line in Barrington, IL. IDOT and the Village of Barrington have agreed to a highway underpass, with CN's tracks remaining at their existing grade, as the preferred alternative. Attached is a preliminary TS&L exhibit for the proposed US 14 underpass at the WCL line (named Exhibit B-5.pdf). We've also attached a preliminary Structure Geotechnical Report for the proposed bridge structure. Please let us know if you have any comments on the proposed design.
In addition, you sent us a couple comments on July 26, 2013 that relate to the attached bridge design. Those comments, and responses, are as follows.
1. We would like to see conventional concrete abutments supported over piles. This would eliminate steel sheet pile wall and tie backs.
We understand that conventional concrete abutments on piles would be preferred over the stub abutments on piles behind anchored sheet pile walls shown in the railroad bridge exhibit. However due to site constraints including a water table assumed to be located above the profile of the depressed roadway and nearby facilities like the shoofly track, anchored or braced sheet piling would be required for the construction of a highwall abutment on piles. Additionally cut retaining walls on both sides of US 14 will be required to prevent the excavation for the depressed roadway from affecting the adjacent properties. Similarly, it will be more economical to build permanent anchored sheet pile walls than to build both temporary anchored or braced sheet pile walls and permanent conventional cast-in-place concrete cantilever T-type walls for these retaining walls.
2. Skew angle 55° is high, means to reduce skew should be considered.
We also understand that it would be preferred to reduce the high 55˚ skew shown in the bridge exhibit. However due to the site constraints described above we do not believe the bridge skew can be reduced. Flattening the skew while accommodating the possible future widening of the bridge would create the need for a very wide median which in turn would require more land acquisition and longer span lengths.
Finally, please let us know whether or not you have any comments on the proposed shoofly design that was sent to you in September. Is the shoofly design acceptable to CN?
Thanks,
Joe

From: Joseph J. Emry, P.E.
Sent: Thursday, October 24, 2013 10:09 AM
To: 'Patrick Jones'
Subject: FW: US 14 at CN/WCL - shoo-fly

Good morning Pat,
Following-up on the message below, I wanted to see if CN has had a chance to review the proposed shoo-fly design, and if you have any questions or comments.
Thank you,
Joe

From: Joseph J. Emry, P.E.
Sent: Wednesday, September 11, 2013 1:36 PM
To: 'Patrick Jones'
Cc: 'Summers, Greg'; andy.rabadi@illinois.gov; 'Kangrga, Dusanka'; 'Kriks, Aren'; Czaplicki, Sarah; 'Niemeyer, Ted'; Robert J. Andres, P.E., PTOE; Gregory J. Hatlestad, P.E., S.E.
Subject: US 14 at CN/WCL - shoo-fly

Pat,
Attached please find plan and profile sheets for a temporary track runaround, or "shoo-fly", concept for the WCL line at U.S. Route 14 in Barrington. The shoo-fly would be included as a part of the highway underpass alternative. The alignment data for the proposed shoo-fly is included on the sheets. Please review and let us know if CN has any comments on the proposed shoo-fly design.
Thanks,
Joe

Joseph J. Emry, P.E.
Project Manager | jemry@civiltechinc.com

Civiltech Engineering, Inc.
450 E. Devon Ave, Suite 300 | Itasca, IL 60143
Direct: 630.735.3955 | Fax: 630.773.3975
www.civiltechinc.com

ATTACHMENT G TO MAYOR KAREN DARCH VERIFIED STATEMENT
CN Q3 2014 Earnings Conference Call
October 21, 2014 4:30 PM ET

Executives

Janet Drysdale - Vice President, Investor Relations

Claude Mongeau - President and Chief Executive Officer

Jim Vena - Executive Vice President and Chief Operating Officer

Jean-Jacques Ruest - Executive Vice President and Chief Marketing Officer

Luc Jobin - Executive Vice President and Chief Financial Officer

Analysts

Fadi Chamoun - BMO Capital Markets

Scott Group - Wolfe Research

Cherilyn Radbourne - TD Securities

Christian Wetherbee - Citi

Walter Spracklin - RBC Capital Markets

Brandon Oglenski - Barclays Capital

Benoit Poirier - Desjardins Securities

Allison Landry - Credit Suisse Securities

Steve Hansen - Raymond James

Bill Greene - Morgan Stanley

Thomas Wadewitz - UBS

Turan Quettawala - Scotia Bank

Ken Hoexter - Bank of America Merrill Lynch

Steven Paget - First Energy Capital

David Newman - Cormark Securities

Operator

Welcome the CN's Third Quarter 2014 Financial Results Conference Call. I would now like to turn the meeting over to Janet Drysdale, Vice President, Investor Relations. Ladies and gentlemen, Ms. Drysdale.

Janet Drysdale<http://seekingalpha.com/search/transcripts?term=Janet+Drysdale&sasource=participant>

Thank you, Patrick. Good afternoon, everyone and thank you for joining us. I would like to remind of the comments already made regarding forward-looking statements. With me today is Claude Mongeau, our President and Chief Executive Officer; Luc Jobin, our Executive Vice President and Chief Finance Officer; Jim Vena, our Executive Vice President and Chief Operating Officer; and J.J. Ruest, our Executive Vice President and Chief Marketing Officer. In order to be fair to all participants I would ask you to please limit yourself to one question.

It's now my pleasure to turn the call over to CN's President and Chief Executive Officer, Mr. Claude Mongeau.

Claude Mongeau<http://seekingalpha.com/search/transcripts?term=Claude+Mongeau&sasource=participant>

Thank you, Janet and thanks to all of you for joining in on this call. I know it's been a long way for some of you, so we will try to keep it to an hour and leave as much as time as possible for your questions. You have seen the results on wire. I think they are solid third quarter results for CN. Clearly we are growing much faster than the economy, which is our game plan. We have achieved record revenue performance. Our revenues are up 16% over last year's. We have had nearly double-digit RTM growth in every commodity that we served. The only exception is coal and we have had good solid disciplined same store pricing as J.J will explain to you when he goes over the details of our strong performance.

We are also balancing operational and service excellence. There is no question our network is fluid. We are having solid service across all of the supply chains that we serve and we are continuing to drive significant efficiency gains. As you see our operating ratio was 58.8%, which is an improvement over last year. Jim will give you more detail on our operating metrics and service performance in a minute.

In terms of financial results, I am pleased to report our operating income is up 19%, our diluted EPS is up 21% versus last year on an adjusted basis and our year-to-date free cash flow is nearly C$1.9 billion and that excludes almost C$200 million of asset monetization that Luc has seen delivered over since the last few months.

So clearly strong financial performance and it underpins our ability to create good financial results and create value for our shareholders. So Luc will give you the contour of those results in more detail in a minute or so.

So clearly we are delivering on our strategic agenda. We have a lot of momentum in the marketplace and we are gearing up to deliver another strong year with strong performance in the fourth quarter. With that I will let the team go over and come back at the end with a wrap-up and Q&A. Jim over to you.

Jim Vena<http://seekingalpha.com/search/transcripts?term=Jim+Vena&sasource=participant>

Hey, thank you very much Claude. Solid third quarter with strength and fluidity shown across the board. The results show our ability to have balance operating and service excellence. We handled 15.4% storage in more RTMs with fluidity and no incremental cost.

Looking at train and terminal productivity it continues on a positive trend. Terminal dwell, car velocity and train speed came in as expected given growth in net traffic mix. We added locomotives already this year and we were able to put them to work efficiently increasing the GTMs pulled per locomotive. Our fuel conservation focus continues with a third quarter betterment of 3% which puts us in a good position to deliver on our goal of 1.5% for 2014. We remain fluid into the fourth quarter with metrics pushing up against last year and with the network operating in a fluid state while handing more traffic. We continue our strong relevant position amongst our peers.

If you turn over to the next page, we have invested and will continue to invest in our operation for safety, operational and service excellence. We continue onboarding new employees and have improved our onboarding quality with the opening of two new training centers in Chicago and Winnipeg. The centers provide our employees a campus with new facilities, curriculum, class training as well as hands-on real life equipment to make them the best trained and safest railroaders we have ever brought on.

We continue to add locomotives to handle growth and we will be receiving 40 more before the year end. We have also placed orders in 2015 and '16 to ensure we are well positioned for continued growth as well as the change to the tier four locomotives next year. We have stress tested our car fleet and have added cars strategically to handle the growth.

Finally we continue to invest in our plant, first and foremost for safety as well as growth. We have invested in many areas but have concentrated on the Edmonton to Chicago corridor with investments on branch lines, double track and yard capacity. Before year end we expect two double track segments between Edmonton and Winnipeg, the development of Transcona Yard in Winnipeg to help with fluidity through Winnipeg, siding extensions of Fort Frances and Superior and the first phase of the Steelton Hill double track to come online.

With that I wanted to pass it over to J.J. and he can give a little more color of where this business is coming from that we are investing for.

Jean-Jacques Ruest<http://seekingalpha.com/search/transcripts?term=Jean-Jacques+Ruest&sasource=participant>

Thank you, Jim and good afternoon to all of you joining us on the phone and later on the webcast. For the next few minutes I will walk you through the third quarter results as well as our commercial outlook and some price and yield comments.

The revenue for the quarter totaled C$3.1 billion or 16% increase over last year. Breakdowns as follow volume and mix produced 11%, same store price was up 3.2%, and you will recall that the second quarter same store price was just under 3%. About 70% of our revenue are same store revenue. The strong U.S. dollar give us 3% and also helped our Canadian manufacturer and there was minimal impact on fuel.

Now let's do the review segment by segment as we do usually on the FX adjusted basis. Starting with petroleum and chemical which posted solid growth of 18%, we doubled our crude carload from last year, we ran the Canadian rail with a third quarter annualized run rate of 135,000 carloads and Canadian heavy crude remained around 60% of our total. We are ramping up two unit train loading facilities operated by mid-stream and pipeline companies which are backed up by long-term commitment from large oil companies.

Propane, gas and diesel were up also nicely and have ongoing potentials. On the metals and minerals revenue which include iron ore, it grew 13%. We moved 50% more frac sand carload than last year. Third quarter annualized run rate was 95,000 carload. This was driven by a production ramp up on the plant that we serve in Wisconsin as well as an uptick in unit train volume and by strong demand from oil shale drilling areas.

Semi-finished steel continues to perform reflecting good demand from automotive and energy sector. Iron ore revenues were flat for the fourth quarter, restocking looks constructive. Forest product revenue increased 4% but the carload fell 3%, lumber and panel shipments to U.S. market increased 11% driven by steady improvement in U.S. housing start.

Short-haul lumber carload to offshore market continue to be down but some revenue was recaptured in our intermodal export match back service from Prince George to the Port of Prince Rupert. Pulp and paper revenue were lackluster in the quarter. Coal revenue was down 6%. The global over production of met coal caused one Canadian mine to be shut this summer and two more will be closed at the end of this year. Our bright spot remained our U.S. utilities coal volume which was up 75% driven by restocking.

Grain reported the biggest gain at CN with revenue of 37%. The Canadian grain revenue was up 50%, yes I said 50% more than last year as we started a record 5,000 hoppers per week in the prairies. Contrary to some media report we are moving a lot of grain and we have the fact to support it.

In our U.S. grain revenue increased about 15% on strong corn volume. CN takes pride in keeping up with U.S. demand and service both grain countries very well. Fertilizer revenue was up 5% driven by strong potash overseas export and automotive revenue was up 13% from the Chrysler business along with improved North American network car supply.

Our intermodal franchise continues to deliver result. Their revenue was increased 12%, international revenue increased close to 25%, domestic revenue was basically flat. We have strong vessel discharge over the West Coast driven by new business, strong import into the U.S. Midwest partly related to the U.S. ILW diversion.

The volume at Port of Montréal was also up a solid 45% which is nice to see in our underutilized eastern network. In domestic it was a mixed bag. We had good door to door retail volume offset by lower hub to hub wholesale volume related to market pricing. Other revenue grew 7%, most of that related to better lake vessel business.

Now turning to the outlook we have a strong demand across many segments, we continue to seek out and aggressively develop opportunities within the energy space. We have a strategy of organic growth and strategy of improving yield with inflation plus pricing and selective upscaling.

If we start by intermodal the import export market demand remain constructive and we have several initiatives in the works. In the Canadian market domestic market we are balancing volume with pricing pressures and will leverage our service offering and our low cost leadership. The reduction in gasoline price currently taking place in North America is equivalent to a big tax reduction on the North American consumers leaving disposable income that should be constructive intermodal volume in the mid-term.

Regarding this year's grain crop, in Canada it is of a lower quality and the volume is less than predicted and more in the range of 58 million tons. We expect to be running hard on grain well into early spring. In the U.S. we are bullish on corn and soybean production in the CN draw territory which are reported to be above last year and of decent quality.

On the coal side the outlook is upbeat for U.S. domestic utilities and bleak for export. Recall that export coal is only 3.5% of CN revenue. From the energy renaissance we aim to achieve our target of doubling the 2013 carload ahead of schedule. Our unique access to Canadian production regions the trend toward unit train operation on network and our strong destination franchise should make the continued growth in the fourth quarter and into 2015.

We have the network capacity, the locomotive capacity the crews and the Chicago solution to meet the need of the crude industry. The outlook for frac sand is also very positive. We have new production facility ramping up and we have new receiving facility as well ramping up. We had guidance to get to $300 million in 2015 for frac sand which we now expect to achieve this year. From a housing start the growth in lumber and panel will be in line with the U.S. housing start progression, the Canadian lumber and panel will continue to be largely dominated by the CN large originating franchise and by the CN much larger rail fleet as well as by a reserve power - reserve capacity entering in 2015.

Moving to price and yield management we find the overall environment to be constructive. The North American rail capacity remains snug and specific geographic network pockets or in specific equipment type or in specific time period of the year. On price we continue to focus on earning inflation plus pricing which we now define as 3% plus and focusing on upscaling marginal business a discipline that pays dividends.

On yield we find that revenue per car and same - are very weak measure of yield execution. For yield we like to use the more decisive tool of revenue to cost ratio for customers private car contribution for cartage for CM provided railcars investment and our round-trip of revenue to cost ratio model for intermodal.

In conclusion on volume we aim to grow faster than the economy at mid to high single digit carload, getting our fair share of the emerging market and on yield we are focused on getting price value for our service and for our capacity to produce industry leading operating margin. So here I will leave it - transfer it to Luc.

Luc Jobin<http://seekingalpha.com/search/transcripts?term=Luc+Jobin&sasource=participant>

All right, thanks very much, JJ. Starting on page 12 of the presentation let me walk you through the key financial highlights of our third quarter's performance. As J.J. outlined revenues were up $420 million or 16% slightly over $3.1 billion. We handled an all-time record volume of nearly 1.5 million carloads in the quarter. Operating income was $1.286 billion, an increase of over $200 million or 19% versus last year.

Our operating ratio was 58.8%. That's an improvement of one full percentage point over last year, as we grew the business at low incremental cost. Now this represents our best quarterly operating ratio performance ever. So it's beating the 58.9% achieved back in the third quarter of 2006 after adjusting for one time fuel hedging gains recorded back then.

Other income was $2 million on the expenses side versus a $5 million gain in 2013. Net income for the quarter is $853 million, up 21%. Foreign currency translation contributed to a favorable impact on net income of $22 million or $0.03 of EPS in the quarter. So the reported diluted EPS reached a $1.04, up 24% versus last year. The adjusted diluted EPS also stands at a $1.04, in this case up 21 % versus the prior year. You will recall that 2013's adjusted results excluded a deferred income tax adjustment relating to a change in provincial corporate income tax rate.

Turning to Page 13, our operating expenses were $1.832 billion, up 14% versus last year or 11% on a constant currency basis. At this point I'll refer to the expense changes in constant currency.

First, labor and fringe benefit costs were $580 million, an increase of 9% versus last year. This was the result of three elements. First, an increase in overall wage cost of $33 million, or about seven percentage points. This is the product of 3% wage inflation, overtime of about 3% and a 5% increase in average headcount versus last year in the quarter. This was partially offset by higher capital work being performed in the quarter versus last year.

Second element is a higher stock based compensation expense in this quarter versus last year which represents a $37 million variance or seven percentage points. The third element is a favorable variance of $21 million or 4% percentage points due to lower pension and benefit expense. This was the result mostly of the pension expense being lower, which offsetted increased benefit costs in the quarter. That pension tailwind is likely to shift to a headwind for 2015 however, since as we stand today interest rates are lower than at the end of 2013.

Using the present discount rate for Canadian Pension plans which is just under 4% and assuming it remained as such until December 31st this would translate into approximately $75 million increase in our pension expense for 2015.

Turning to purchased services and material expenses those were $378 million, an increase of 16% or $52 million. The key driver here is the 15% increase in GTMs in the quarter. As such, repair and maintenance crew and other volume driven expenses were up $19 million, as were material cost up $23 million, while intermodal trucking and transloading expenses were up $10 million.

On the fuel side, fuel expense stood at $446 million, up $37 million or 9% versus last year. Higher volume represented an increase of 14 percentage points in the quarter, while a lower price was an offset for two percentage points. Our overall fuel productivity was very strong in the quarter with 3% improvement and a favorable variance of $12 million.

Equipment rents were $83 million, $12 million higher than last year. And this is mostly attributable again to higher equipment leasing cost and more car hire expenses. Casualty and other costs were $87 million, by $8 million or 11% higher than last year. This was due to higher fees, taxes and other cost as well accident related cost which were partially offset by lower cost relating to legal and environment expenses.

Turning to free cash flow on Page 14, we generated just over $2 billion of free cash in the nine months of the year, an increase of $738 million versus last year. Excluding proceeds from major asset sales this meant over $108 billion of free cash flow. This was the product of strong cash flow generated from operations including favorable working capital. The working capital improvement is in part due to the timing so expect a lower benefit when we reach year end. Cash used in investing activities was $1.2 billion and this was mostly the result of our capital expenditure program where we have spent to-date $1,350 million which was partly offset by major asset sales of approximately $175 million. So we still have $900 million of our capital program to complete in the fourth quarter.

We have also completed earlier this month our 2013 and 2014 share repurchase program, returning $1.4 billion of capital to shareholders after acquiring 22 million shares at an average cost just under $63. I am pleased to report that today our Board of Directors has approved a new share repurchase program for 2014-2015 providing for up to 28 million shares to be repurchased and we intend to vote approximately $1.7 billion of capital towards achieving for this objective. Our record of continuous dividend growth at a compound annual growth rate of 16% over 18 years along with the substantial share buyback overtime, I think that record speaks for itself.

We continue to invest significantly in the business while enhancing shareholders returns. On dividends going forward we will be back to you in January while our decision with the board is very productive and should make our shareholders happy on what will be in 2015 our IPOs 20th Anniversary.

Finally on page 16, our financial outlook. We are now in the home stretch and we have a very good momentum. We continue to be optimistic with our prospects for the balance of the year. Our objective remains the same to grow faster than the economy and to do so at low incremental cost. As we stated in our last earnings call we believe that we have the potential in the second-half of 2014 to slightly exceed the overall earnings growth achieved in the first half of the year and that is of 17%. Given this perspective we are maintaining our annual guidance, that is aiming for solid double-digit EPS growth in

2014 over the $3.06 of adjusted diluted EPS in 2013. We are also affirming our guidance for free cash flow to reach the higher end of the $1.8 billion to $2 billion excluding major asset sale.

We are also maintaining our capital investment program at approximately $2,250 million and if weather permits we will try to push the envelope even a bit more before winter sets in. So the CN team remains as committed as always to delivering superior results and we continue to unfold the strategic agenda for 2014 and beyond

Back to you.

Claude Mongeau<http://seekingalpha.com/search/transcripts?term=Claude+Mongeau&sasource=participant>

Thank you, Luc and it's clear the team will be there deliver that outlook for you and so we can report on it in January and start the 20th year of CN's IPO on a good note. As Jim and J.J. explained we are driving clearly end-to-end efficiency, service and profitable growth and we are doing it with quite confidence leading the way in the industry.

We continue to have a very disciplined approach to investment to increase our safety, increase capacity, boost the resiliency and do all of that with a view to stay ahead of the curve on all these key fronts. The goal is to create solid shareholder value for our customers and our shareholders and that's what this team of railroader is all about.

And with this we will turn it over to your Patrick, for the Q&A.

Question-and-Answer Session

Operator

Thank you. We will now take questions from the telephone lines. (Operator Instructions). The first question is from Fadi Chamoun from BMO Capital Markets. Please go ahead.

Fadi Chamoun<http://seekingalpha.com/search/transcripts?term=Fadi+Chamoun&sasource=participant> - BMO Capital Markets

Good evening everyone and congratulations on the good results. Maybe my question is more on the topic of the day, I guess Claude if you can give us your thoughts on the possibility of M&A in the rail sector specifically among the class 1 railroads?

Claude Mongeau<http://seekingalpha.com/search/transcripts?term=Claude+Mongeau&sasource=participant>

Yeah, I would have thought you had your share of the M&A question today Fadi but let me just quickly put my view. We won't comment on other railroad's strategy but we have been very consistent and we believe with fixed railroad in North America the ability to provide service, the ability to grow organically, the ability to unfold an agenda of supply chain collaboration and create end to end service that will allow secular shift of growth ahead of inflation and solid pricing in the industry is the best going forward strategy that's certainly our strategy at CN and we haven't change our views on that matter.

Fadi Chamoun<http://seekingalpha.com/search/transcripts?term=Fadi+Chamoun&sasource=participant> - BMO Capital Markets

Maybe one follow-up, just sort of, if they were to be hypothetically a merger in the industry, do you think that one merger is possible and that the industry can drive on with five class ones or is it more likely that if they were to be a merger it would be the start of round that will take the industry down to three or four participants.

Claude Mongeau<http://seekingalpha.com/search/transcripts?term=Claude+Mongeau&sasource=participant>

I think the keyword in your question Fadi is hypothetically and if there was a merger I believe there will be networks effect then I believe it would likely start with the four arrows in the US going down to two. That's just my own personal assessment but I emphasize again the keyword is hypothetically.

Fadi Chamoun<http://seekingalpha.com/search/transcripts?term=Fadi+Chamoun&sasource=participant> - BMO Capital Markets

Okay. Thank you.

Operator

Thank you. The next question is from Scott Group from Wolfe Research. Please go ahead.

Scott Group<http://seekingalpha.com/search/transcripts?term=Scott+Group&sasource=participant> - Wolfe Research

Hey, thanks. Afternoon guys.

Claude Mongeau<http://seekingalpha.com/search/transcripts?term=Claude+Mongeau&sasource=participant>

Afternoon Scott.

Scott Group<http://seekingalpha.com/search/transcripts?term=Scott+Group&sasource=participant> - Wolfe Research

So back to a record operating ratio I want to ask you if you think that is it realistic to do a full year at 68 or better than 60 or is the seasonality of 1Q just make that unrealistic and just along those lines on the topic of margins, we are facing seems like set to accelerate but pension becoming a headwind, do you think incremental margins are better or worse in '15 than '14.

Claude Mongeau<http://seekingalpha.com/search/transcripts?term=Claude+Mongeau&sasource=participant>

Clearly the pension headwind is one headwind that's out there, Luc shared the discount rate for Canadian Pension plans at the moment is 39, 39.5 and we're two month away from December 31st, it's looking like next year most likely this will be headwind. But we have headwinds, we have tailwinds, we focus on what we can control and we have guidance that we believe we can continue to improve our margins and achieve sustainable low, fix the operation ratio and that's what we're trying to deliver but if you look at our third quarter results, we have again a sub 60 operating ratio it's not the first time in our history we typically have again a sub 60 operating ratio. It's not the first time in our history, we typically sub 60 operating ratio in the third quarter. That's the best quarter to have that in the summer when things are rolling and all of our capital programs are happening.

In the fourth quarter when the trains wind down, when winters comes in the fourth quarter and the first quarter typically have much higher operating ratio just because of the accounting for capital work and also the weather and network effect that comes with operating conditions that are more difficult. So we're going to finish the year with a record operating ratio, it looks like and we're going to continue to improve like we have the last few years and in the third quarter with a one point improvement in the OR we delivered 19% of operating income. We're pretty pleased about that, it's our strategy, it's working and we will continue with it.

Luc Jobin<http://seekingalpha.com/search/transcripts?term=Luc+Jobin&sasource=participant>

Hey Scott, it's Luc. Just I mean year-to-date we're 62.2% in terms of OR and if you recall I mean the first quarter was extremely, extremely difficult. So clearly in my mind, I mean there will be puts and takes like pension as an example but clearly we think that the low 60s is imminently doable and that's what we're striving for.

Scott Group<http://seekingalpha.com/search/transcripts?term=Scott+Group&sasource=participant> - Wolfe Research

Okay. Thank you guys.

Claude Mongeau<http://seekingalpha.com/search/transcripts?term=Claude+Mongeau&sasource=participant>

Welcome.

Operator

Thank you. And the next question is from Cherilyn Radbourne from TD Securities. Please go ahead.

Cherilyn Radbourne<http://seekingalpha.com/search/transcripts?term=Cherilyn+Radbourne&sasource=participant> - TD Securities

Thanks very much and good afternoon. I wanted to ask you question on grain. Clearly we've had a historic year in grain in Canada. So I was just wondering if you could update us on the state of the grain supply chain and address the reasons for some other recent well publicized instances where CN was unable to move the weekly volumes mandated by the government.

Claude Mongeau<http://seekingalpha.com/search/transcripts?term=Claude+Mongeau&sasource=participant>

Well thank you for that question. Cherilyn you're right. We did a record movement last year, it's about 15% more than our prior record for grain movement in Canada and 20% more in an average. The good news is the Canadian grain system is back in balance. If you look at it with the late August, the carry out for grain was less than 10 million metric tons when the orders started to pick up couple weeks ago. Our orders in August and early September were temporarily down a little bit too around 4500 cars just because we were waiting for the new harvest and we have caught up with the supply chain.

Grain companies took advantage of that short term lull to do their annual maintenance, Rupert for instance for us was down for 10 days for their annual maintenance, Vancouver terminals were down also the same and so you have all the signs of a supply chain that is back in sync and it's actually quite good news for us. At the same time while we're not quite moving the minimum order in council for a few weeks because it was increased on August 1st by 7% exactly when we hit balance back, we're actually moving record volumes. JJ said it we're up 50% on a year-over-year basis in the third quarter.

We have and it's also important we have maintained our market share which is slightly above 50% of all the grain that moves in Western Canada and that's true of the last two months as well coming into the new crop and we're doing our best to move all the grain that's coming our way and do so for Canadian farmers, so that we can stay in balance and move the crop that's coming, if JJ is right at 58 million tons or so. We should be able to move hard through the fall and winter and we should probably be done in early spring at the latest early summer be back into a position where we're storing cars, waiting for the next harvest.

Cherilyn Radbourne<http://seekingalpha.com/search/transcripts?term=Cherilyn+Radbourne&sasource=participant> - TD Securities

That's great. Thank you. That's my one.

Claude Mongeau<http://seekingalpha.com/search/transcripts?term=Claude+Mongeau&sasource=participant>

Thank you. You are very discipline about your one question, Cherilyn.

Operator

Thank you. The next question is from Chris Wetherbee from Citi. Please go ahead.

Christian Wetherbee<http://seekingalpha.com/search/transcripts?term=Christian+Wetherbee&sasource=participant> - Citi

Thanks. Good afternoon. Maybe a question on the energy markets, just thinking about the recent volatility, I was just kind of curious how to think about sort of the sensitivity of the crude business and the sand business in respect to that and if you see the potential for any slowdown in either one of those commodities, it sounds like on the sand side you're ahead of your expectations, just want to get a rough sense of maybe how we think about moving into 2015?

Claude Mongeau<http://seekingalpha.com/search/transcripts?term=Claude+Mongeau&sasource=participant>

Thank you Chris. I think roughly we're looking at - you have the oil, or oil shale gas, you have oil sand and you also have SAGD. The question really right now is more about the shale oil. I think the oil sand and the SAGD those production are much more difficult to curtail or change course. So shale oil which is really a Bakken or Eagle Ford or Permian, the last two being in Texas is where the question is more about at what price do you slowdown. So some expert would say at $80 you might start slowing down these drilling activities in these shale oil area and these three area at $70 you would have a major cutback but broadly and that would affect both the - whatever you move out there, by crude, by rail or by pipeline and that would also potentially I think the franc sand.

So it's really when you look at shale oil in the area where people are drilling for shale oil and we have the different list of all areas what you drilling for is where the question where they come in. So at this point we just look our frac sand as an indicator of what's happening in the shale oil area. Two of the three are up, one is slightly down and right now we're not saying as we speak in the third week of this quarter. We're not seeing things that already indicate something of the fundamental trends either up or down even in these three area.

Christian Wetherbee<http://seekingalpha.com/search/transcripts?term=Christian+Wetherbee&sasource=participant> - Citi

Okay. That's very helpful. Thank you.

Claude Mongeau<http://seekingalpha.com/search/transcripts?term=Claude+Mongeau&sasource=participant>

Thank you.

Operator

Thank you. The next question is from Walter Spracklin from RBC. Please go ahead.

Walter Spracklin<http://seekingalpha.com/search/transcripts?term=Walter+Spracklin&sasource=participant> - RBC Capital Markets

Thanks very much. Good afternoon everyone. I guess my question is on cost and I know Claude you had indicated some of the seasonality impacts that exist when you move to fourth quarter, but given that is, I think it was JJ might have been, as JJ mentioned with the snug capacity, how might you be increasing your employee base or preparing for winter where you had somewhat full capacity utilization as you go into that, what can be a troublesome period?

Claude Mongeau<http://seekingalpha.com/search/transcripts?term=Claude+Mongeau&sasource=participant>

Whether it's investment in capacity and Jim gave you a good run down on it, so whether it's our crew base we want to be ahead of the curve, we have a lot of attrition, we're hiring this year more than 3,000 people, the large majority of that is attrition of our employees who are coming to retirement. So really being ahead of the curve the worst that can happen is we are - we are going to have to wait for the quarter before we can correct the situation. So we want to be hiring a little ahead of the curve so that we can handle the business appropriately. It's no secret that last winter was very difficult. We know we don't control weather and but we do want to do a better job this year subject to the elements it and so we have the locomotives, we have the crews, we will continue to invest ahead of the curve in terms of capacity and we will do this to be able to serve our customers and keep our supply chains in sync.

Walter Spracklin<http://seekingalpha.com/search/transcripts?term=Walter+Spracklin&sasource=participant> - RBC Capital Markets

So your employee base is where it should be right now or do we see a big tick-up in fourth quarter?

Claude Mongeau<http://seekingalpha.com/search/transcripts?term=Claude+Mongeau&sasource=participant>

We continue to increase it but Luc maybe you want to give a little bit there?

Luc Jobin<http://seekingalpha.com/search/transcripts?term=Luc+Jobin&sasource=participant>

Yeah, if you look at the run rate through the third quarter it's actually about 3% up. In the third quarter we have been stepping it up so I mentioned 5% is the average work force that we were carrying through deferred and probably we will higher at that level, somewhere at that level in the fourth quarter. Remember it takes about six months to get a conductor fully trained and on the premises, working productively. So we want to make sure that we fill the pipeline and so we can get through the winter with as many crews as we can.

So there is a little of a seasonal push that we are doing right now. If you look longer-term I would say it's probably back down to the 3% give or take 3% of the run rate is probably a good place to be but you know we also have handling a lot traffic I mean labor productivities are up 10% in the third quarter and is being running about 8% year-to-date. So we have visibility on the business that's coming in our way and that's why combined with the downside protection of attrition that Claude talked about that's why we are taking this opportunity for renewal and beefing up a little bit for the winter challenge.

Claude Mongeau<http://seekingalpha.com/search/transcripts?term=Claude+Mongeau&sasource=participant>

And we have a little buffer that we always keep as we have transportation offices and officers ready to fill in what they have to from Chicago North. So we are building the right number of people, making sure we are just ahead of the curve. We know we have to hire for the first quarter and second quarter next year so we are little ahead and on top of that we got a buffer with the managers that we need to use.

Walter Spracklin<http://seekingalpha.com/search/transcripts?term=Walter+Spracklin&sasource=participant> - RBC Capital Markets

Perfect, it makes sense. Thank you very much.

Claude Mongeau<http://seekingalpha.com/search/transcripts?term=Claude+Mongeau&sasource=participant>

Thank you Walter.

Luc Jobin<http://seekingalpha.com/search/transcripts?term=Luc+Jobin&sasource=participant>

Thank you Walter.

Operator

Thank you the next question is from Brandon Oglenski from Barclays. Please go ahead.

Brandon Oglenski<http://seekingalpha.com/search/transcripts?term=Brandon+Oglenski&sasource=participant> - Barclays Capital

Hey Claude I hate to do it, but I want to ask one more on M&A because I heard there is hokey team in Florida looking for a home so if you guys have any insight in to maybe future in Quebec but, nevertheless J.J. you talk about domestic intermodal and I think you threw in some commentary about pricing competition in Canada. Can you elaborate a little bit more in that, what does that mean for the outlook as it can be more difficult to share there just given what you know your competitors folks done right now?

Jean-Jacques Ruest<http://seekingalpha.com/search/transcripts?term=Jean-Jacques+Ruest&sasource=participant>

Our revenue on the domestic intermodal which is a combination of Canadian domestic and cross border east and west as I said was flat in the quarter. We are not necessarily sort of shy with being flat but it starts on the basic principle that yield is a critical component. So yield for the enterprise, yield for intermodal moment and yield for Canadian domestic market, so we are pacing our effort in volume with our - what we believe is the price that is the right price for marketplace and that's why right now in the third quarter we were flat and it is what it is, it's a choice that we face and we will see in the next few quarters how we manage that.

Brandon Oglenski<http://seekingalpha.com/search/transcripts?term=Brandon+Oglenski&sasource=participant> - Barclays Capital

Okay, appreciate the color, thanks.

Claude Mongeau<http://seekingalpha.com/search/transcripts?term=Claude+Mongeau&sasource=participant>

Thank you Brandon.

Operator

Thank you. The next question is from Benoit Poirier from Desjardins Capital Markets. Please go ahead.

Benoit Poirier<http://seekingalpha.com/search/transcripts?term=Benoit+Poirier&sasource=participant> - Desjardins Securities

Yeah, when we look at our RTM they were up 13% in the quarter. I was just wondering if you could provide more color on the expectation for Q4 and also more color about more specifically what we should expect on the grain and intermodal side given they are facing a tougher comp for growth.

Claude Mongeau<http://seekingalpha.com/search/transcripts?term=Claude+Mongeau&sasource=participant>

On grain last year we were running very hard. We had a bit of the setback last year as you recall in October we had miss-up on the main line so this year if everything is okay and network runs well and the winter starts late we might actually to be able to do better than last year on Canadian grain, that would be more of kind of operation condition from a weather point of view especially in December. U.S. grain last year was also very strong but it could actually be as strong if not stronger this year as we got a good crop in front of us and our network in the U.S. is very fluid and I want to emphasize we serve the U.S. framer just as well as fairly the Canadian farmer we serve both.

I think your other question was on the Intermodal, Benoit?

Benoit Poirier<http://seekingalpha.com/search/transcripts?term=Benoit+Poirier&sasource=participant> - Desjardins Securities

Yeah, weather you see the flow moving back to the western ports in the U.S. I was just wondering there was an impact as well.

Jean-Jacques Ruest<http://seekingalpha.com/search/transcripts?term=Jean-Jacques+Ruest&sasource=participant>

So on the Intermodal at the national side or the overseas business came in earlier this year, customers wanting to bring their product earlier because of fear of issues on U.S. west coast. We are over that surge if you wish as we speak right now the whole network and the Canadian ports are very much in balance and very current. At the same time we hear more and more that LA Long Beach has congestion issues as this point as we speak which means that maybe in three weeks from now we start to see some more diversion of traffic again if customers decide to load for Canadian ports in Asia as opposed to people loading for Long Beach. So we will see if there is a bit of the pick-up in November which pick-up would be related to congestion in Long Beach to be seen.

Benoit Poirier<http://seekingalpha.com/search/transcripts?term=Benoit+Poirier&sasource=participant> - Desjardins Securities

Okay, thanks J.J. for the time.

Jean-Jacques Ruest<http://seekingalpha.com/search/transcripts?term=Jean-Jacques+Ruest&sasource=participant>

Thank you very much.

Operator

Thank you. The next question is from Allison Landry from Credit Suisse. Please go ahead.

Allison Landry<http://seekingalpha.com/search/transcripts?term=Allison+Landry&sasource=participant> - Credit Suisse Securities

Thanks, good afternoon. Thinking ahead a little bit, just given a couple of large contract wins this year in conjunction with some difficult green comps what are your initial thoughts for car load and RTM growth in 2015?

Claude Mongeau<http://seekingalpha.com/search/transcripts?term=Claude+Mongeau&sasource=participant>

We are not - we are going to give you a better color for that Allison in January when we talk about the guidance for the next year. But broadly speaking as you would know following the market there is no question that global trends are - they are watching at the moment, China seems to be slowing, Europe with Germany appearing to stall a little bit, it's certainly not a bright spot and so global trends are not the best. There has been a bit of deterioration over the last couple of months. The U.S. economy is a bright spot and we see that continuing. There's quite a bit of momentum, both in durable goods, housing starts, there is a whole gamut of what needs to get moved in the U.S.

So it's a mixed bag but we are constructive. There is going to be not as much as 2014 but there is going to be a lot of grain to move, there is going to be good growth with everything that touches our U.S. North American types of flow and perhaps uncertainty and sluggish in global offshore market. We are monitoring everything and we are broadly constructive and we will give you a better more precise update in January.

Allison Landry<http://seekingalpha.com/search/transcripts?term=Allison+Landry&sasource=participant> - Credit Suisse Securities

Okay, thank you. That was a great answer thanks.

Operator

Thank you. The next question is from Steve Hansen from Raymond James. Please go ahead.

Steve Hansen<http://seekingalpha.com/search/transcripts?term=Steve+Hansen&sasource=participant> - Raymond James

Hi, guys good afternoon. Just circling back on the frac sand question, just a little more specifically given that you have gotten into your target here already, what kind of visibility do you have on new mines coming online in addition from the recent announcements around growth going forward and I suppose as a follow-up to that what kind of constraints do you still see in the system on receiving terminal side you know that's been a constraint up in Canada of late, trying to get a frame of reference for growth into 2015?

Claude Mongeau<http://seekingalpha.com/search/transcripts?term=Claude+Mongeau&sasource=participant>

Yeah, Steve the growth will come from the plants which are already on line to fully ramp up to full capacity. Also we need more destination terminal either bigger one or unit train one which are being built as we speak and there might be some other mine being built on the CN network in 2015 time will tell. And any other fundamental demand for what's the price of natural gas, what the price of WTI, for shale oil and much of the prices are liquid, natural gas and liquid right now look promising. Shale oil, people have different views and different questions but frac sand has still a long way to go. I mean that's still very much an emerging market and CN is in good position to - you can have different views how big that is, the same thing with crude oil by rail you can have different view how big that is but when you decide how big it is in your model you can assure that CN will get its fair share of both these markets.

Jean-Jacques Ruest<http://seekingalpha.com/search/transcripts?term=Jean-Jacques+Ruest&sasource=participant>

No question Steve that we have a very strong origination franchise that we now ship in both frac sand and energy markets in general with an equally if not stronger destination franchise. So we see those markets as constructive.

Claude Mongeau<http://seekingalpha.com/search/transcripts?term=Claude+Mongeau&sasource=participant>

Yes people like our destination franchise, they also very much like super Chicago solution. Now obviously frac sand is a big interline business and the interline with CN is by and large the Chicago and we can get in and out of Chicago very fluidly.

Steve Hansen<http://seekingalpha.com/search/transcripts?term=Steve+Hansen&sasource=participant> - Raymond James

Very helpful, thanks.

Claude Mongeau<http://seekingalpha.com/search/transcripts?term=Claude+Mongeau&sasource=participant>

Thank you.

Operator

Thank you. The next question is from Bill Greene from Morgan Stanley. Please go ahead.

Bill Greene<http://seekingalpha.com/search/transcripts?term=Bill+Greene&sasource=participant> - Morgan Stanley

Hi, good afternoon. I just wanted to return to the revenue question and that is when we look at the long-term here at least in 2014 CN and CP for that matter the Canadian rail markets grown quite a bit faster than the U.S. rail market and maybe some of these things Claude that you just referred to in terms of structural opportunities but I am curious if you can sort of talk about how you think about that long-term market if you thought the total addressable market, is it fair that it continue to grow in the double-digits or do you feel this is a unique year and we are really more of a mid to high single-digit kind of sustainable growth rate for the revenue? Thanks.

Claude Mongeau<http://seekingalpha.com/search/transcripts?term=Claude+Mongeau&sasource=participant>

I think Bill you just have to look outside the window at the global economy which is slowing and you have to look at all the key markets, grain we are coming off of a 100 year crop. So over the next two years there is a $170 million or so of grain movement in Canada to go back to an average crop. Now an average crop is just that is an assumption but there is no question you are starting off of a very high base in grain. Some of the export markets that are tied to global activity, whether it's coal or potash are in a slower growth to flat mode. Energy markets are constructive and will continue to do so if unless prices continue to decline as they have recently and we had a good North American economy supporting the other commodities whether it's automotive, forest product, industrial products, intermodal.

A lot depends on innovation, supply chain, thinking, our ability to grow against market share, to grow market share against trucks, to help our customers win in the market and our revenue model has not changed. You can decide on the economy and then add a little bit more volume as we outpace the economy on a volume basis and add pricing a little bit of ahead of inflation. You certainly get good growth but in my model you don't get to double digit unless you have a much stronger economy or something that turns around.

Bill Greene<http://seekingalpha.com/search/transcripts?term=Bill+Greene&sasource=participant> - Morgan Stanley

Okay, very helpful, thank you.

Operator

Thank you. The next question is from Tom Wadewitz from UBS. Please go ahead.

Thomas Wadewitz<http://seekingalpha.com/search/transcripts?term=Thomas+Wadewitz&sasource=participant> - UBS

Yes, good afternoon. I have a question for you J.J. I know you have had some on the crude by rail topic but wanted to see if you could give us a sense of what crude by rail carloads might be in 2014 just a kind of framework? And then how you might think about that number for 2015 as kind of a framework and then on sensitivity is there a lever you said the oil sands production is pretty robust you have to fall pretty far to see that reduce, but is that - how far would it fall to maybe put risk at your 2015 expectations?

Jean-Jacques Ruest<http://seekingalpha.com/search/transcripts?term=Jean-Jacques+Ruest&sasource=participant>

Well we are not providing at this point 2015 specific targets carload for crude by rail. We think our business will ramp up significantly that's because of customers investment either in loading facilities, unit train or loading facilities, many of them being unit train also as well. Also on the belief that the cars will come out of the shop we are talking to new cars and customers that we are dealing with will have them early enough in the year for everything to pan out.

Regarding the price of WTI and Brent and the Western Canada Select and all these spreads, many of these capital investment at origin and destination fleet are quite significant, and so once you start the momentum going in whether the price is up $5 or down $5, I don't think the big oil company will start to change the strategy in the same way as they don't when they invest into pipeline. So I think the issue is more of a mid-term and short-term unless as I said earlier when it maybe relates to shale oil where will you drill a new - when you start drilling against a new hole at $70 maybe not, but once you get going on oil sands you keep on going. But we are not providing specific numbers and but we are in position to capitalize on whatever that is out there where it's big, it's big for us to.

Claude Mongeau<http://seekingalpha.com/search/transcripts?term=Claude+Mongeau&sasource=participant>

And we're clearly we're ahead of our own guidance on the energy markets Tom and continue to see good momentum. As I said we had an extremely strong franchise both at origin and destination. And as J.J. said shale plays in the U.S., the fast replenishments, drilling maybe more susceptible to short-term pricing, long-term oil plays in Western Canada, not in the short-term, it would be more long-term the pace of investments and how that pans out three-five years from now as opposed to next year. They got the commitments, the capital's in the ground they will move what they produce.

Thomas Wadewitz<http://seekingalpha.com/search/transcripts?term=Thomas+Wadewitz&sasource=participant> - UBS

How far out is that time lag, that's more than a year that actually...?

Claude Mongeau<http://seekingalpha.com/search/transcripts?term=Claude+Mongeau&sasource=participant>

Yes, for heavy oil sands you are talking like multi-year time frames for these capital deployment. So three, five, seven, ten years.

Jean-Jacques Ruest<http://seekingalpha.com/search/transcripts?term=Jean-Jacques+Ruest&sasource=participant>

Yes what's constructive is more and more you hear Executive or CEO of a larger oil producer or oil buyer who talks about crude by rail being a permanent part of their portfolio, how they get product to markets. And how they are waiting to continue to support major capital investment or to do take or pay for product with people who make these capital investments to keep that going because obviously there is a challenge when it comes to building pipeline or getting the permitting and there is also a challenge how - where the pipeline gets you in terms of what kind of net back you get there and I think the acid test of crude by rail for an oil producer an oil buyer has passed. We made that test more than one time this year and last year. So the market sees the value of that transportation mode.

Claude Mongeau<http://seekingalpha.com/search/transcripts?term=Claude+Mongeau&sasource=participant>

Specially at the margin because the I mean the total for the pipelines that are not yet built is obviously much higher than people thought when they started the approval process six years. So you move as the price of pipeline goes up, as we move more and more into an under dilutive mix or bitumen we have a chance the price competitive and we certainly provide mass market access. As long as we can do it safely we see a long-term trend for CN to be able to help market access to energy markets across North America.

Thomas Wadewitz<http://seekingalpha.com/search/transcripts?term=Thomas+Wadewitz&sasource=participant> - UBS

Okay. Just to be clear you see very little sensitivity of production in the next year, two, three years at current oil prices you just think there is a big long time lag. And so very little sensitivity to declining oil prices?

Jean-Jacques Ruest<http://seekingalpha.com/search/transcripts?term=Jean-Jacques+Ruest&sasource=participant>

Canadian heavy crude has different sensitivities than shale oil, different model.

Thomas Wadewitz<http://seekingalpha.com/search/transcripts?term=Thomas+Wadewitz&sasource=participant> - UBS

Yes, they do, yes, talking about Western Canada.

Jean-Jacques Ruest<http://seekingalpha.com/search/transcripts?term=Jean-Jacques+Ruest&sasource=participant>

Yes.

Thomas Wadewitz<http://seekingalpha.com/search/transcripts?term=Thomas+Wadewitz&sasource=participant> - UBS

Thanks for the time, I appreciate it.

Jean-Jacques Ruest<http://seekingalpha.com/search/transcripts?term=Jean-Jacques+Ruest&sasource=participant>

Thank you, Tom.

Operator

Thank you. The next question is from Turan Quettawala from Scotia Bank. Please go ahead.

Turan Quettawala<http://seekingalpha.com/search/transcripts?term=Turan+Quettawala&sasource=participant> - Scotia Bank

Yes good afternoon. J.J. could you give us a sense of what percent of your contracts on crude by rail are take or pay?

Jean-Jacques Ruest<http://seekingalpha.com/search/transcripts?term=Jean-Jacques+Ruest&sasource=participant>

I will not do that and I think the question maybe you guys should ask is who has a take or pay with whom. There is take or pay but maybe it's more along the line of those who actually invest major capital. It's an industry that works along the line with the pipeline industry. People commit to it, they commit to investment. I think that there may be different ways to maybe understand what this is all about.

Turan Quettawala<http://seekingalpha.com/search/transcripts?term=Turan+Quettawala&sasource=participant> - Scotia Bank

Okay.

Claude Mongeau<http://seekingalpha.com/search/transcripts?term=Claude+Mongeau&sasource=participant>

The underwriting tends to be with the loading facility clients and we furnish line haul and locomotives and resources to commit to markets. All of these supply chains are backed by very significant investments on the part of those who are selling them up. Cars, loading facility, unloading facility and the railroads are linking the two.

Turan Quettawala<http://seekingalpha.com/search/transcripts?term=Turan+Quettawala&sasource=participant> - Scotia Bank

Okay, fair enough. And I guess maybe one more quickly on intermodal volumes, so over the last three years I think CN has done extremely well here on the intermodal side I think your average RTM growth is about 9% or so. Now looking into next year you obviously going to have some tough lap periods on the international side and the domestic business maybe gets to be looking more competitive. So I guess my question is J.J. or Claude maybe in terms of your growth in intermodal over the next one to two years, can you still do sort of significantly above GDP as you have been doing the last two years or do you think it will sort of start going closer to GDP?

Claude Mongeau<http://seekingalpha.com/search/transcripts?term=Claude+Mongeau&sasource=participant>

Well lapping tough years is our usual challenge Turan.

Turan
Quettawala<http://seekingalpha.com/search/transcripts?term=Turan+Quettawala&sasource=participan
t> - Scotia Bank

I know.

Claude
Mongeau<http://seekingalpha.com/search/transcripts?term=Claude+Mongeau&sasource=participant>

We have been at it for 15 years and we feel good about our prospects and we'll provide you with more detailed guidance in January. There is no question, just the sheer size of the initiatives we have in place and the carryover effect into next year, we're broadly constructive that we will continue to grow and clearly we will grow faster in the economy. It's just a question of putting that in context and then assessing what the economy will be and lining up all the initiatives and we'll do that in January.

Turan
Quettawala<http://seekingalpha.com/search/transcripts?term=Turan+Quettawala&sasource=participan
t> - Scotia Bank

Okay. Thank you very much.

Operator

Thank you. The next question is from Ken Hoexter from Merrill Lynch. Please go ahead.

Ken Hoexter<http://seekingalpha.com/search/transcripts?term=Ken+Hoexter&sasource=participant> -
Bank of America Merrill Lynch

Wonderful. Good afternoon and Jim great job on the operational performance, but when you think about heading it to winter and next year and given the growth that you and Claude and JJ are talking about, can you talk a little bit more about access to locomotives and I know you threw out some numbers on the prepared comments but talk about, given that we've got one manufacturer kind of disappearing at the bidding next year the ability to get access to those locomotives and what size and amount are you bringing on board.

Jim Vena<http://seekingalpha.com/search/transcripts?term=Jim+Vena&sasource=participant>

Okay, Ken thank you very much. So, take a look at what was happening. We've got one manufacturer and it looks like late '16, early '17 before the second one comes in and we're planning for 2017. So when we built in our model and growth and how the efficiency of the locomotives, we've got securement for 120 as we labeled but we also have options to bring in more, so that we could make a decision over the next 12 months to decide exactly what the final number will be but I think we were set up in the right position. We've brought in locomotives for this winter, we got some more coming in January and through the rest of the year next year committed and we have an option to build on that 120.

Claude Mongeau<http://seekingalpha.com/search/transcripts?term=Claude+Mongeau&sasource=participant>

And it's important Ken because some of these unit train service in energy markets in particular, they tend to be very locomotive intensive. So you get a lot of good growth but you have to have the ability to match it up with right locomotive power and that's exactly what Jim and Luc have been working on and I feel very good that we have our base commitments lined up and we have options to get us through well into '17, '18 when we will hopefully have two manufacturers back in the market serving class one railroads.

Ken Hoexter<http://seekingalpha.com/search/transcripts?term=Ken+Hoexter&sasource=participant> - Bank of America Merrill Lynch

Claude, do you think that's going to be an issue into next year in terms of access to the locomotives or is the industry prepared?

Claude Mongeau<http://seekingalpha.com/search/transcripts?term=Claude+Mongeau&sasource=participant>

What the last year locomotive power was very tight across the entire North American industry and that's a function of velocity with the congestion that we face with winter. If you assume a more normal winter, you assume continued preparation like we have discussed and all the investments we're making to make sure we're fluid and we feel good about where we stand, we certainly are resourcing to be able to handle the growth that we see in front of us.

Ken Hoexter<http://seekingalpha.com/search/transcripts?term=Ken+Hoexter&sasource=participant> - Bank of America Merrill Lynch

Great. Appreciate the insight. Thanks guys.

Claude Mongeau<http://seekingalpha.com/search/transcripts?term=Claude+Mongeau&sasource=participant>

Thank you Ken.

Operator

Thank you. The next question is from Steven Paget from First Energy Capital. Please go ahead.

Steven Paget<http://seekingalpha.com/search/transcripts?term=Steven+Paget&sasource=participant> - First Energy Capital

Good afternoon and thank you. Jim I recall in Chicago that you asked rhetorically what is it about CN and gave a good answer and in light of your operating ratio and other results today I think people might want to hear that, would you mind repeating that today?

Jim Vena<http://seekingalpha.com/search/transcripts?term=Jim+Vena&sasource=participant>

I said so many words, I am not absolutely sure but I think it's basically the people and I've got one heck of a strong team out there. So you've got to have the right leadership from the very top of the house and I think we've got a CEO who understands how to balance what we're trying to deliver, not having a short term view. He has got a long term view of building this company and keep on growing but people out in the field that we've got. I've got a lot of bench strength whether its Mike Corey out west, whether it's Jeff Liepelt or John Orr and I can go through them, it's about, we've got a lot of experience from the ground up. These guys have all started switching cars, cleaning locomotives and they know their business.

We've got a strong team and we're driven with one thing and that is to be able to move a box car as fast as possible. So the agenda is clear, we want to get ahead of the game and it's the team that does it.

Claude Mongeau<http://seekingalpha.com/search/transcripts?term=Claude+Mongeau&sasource=participant>

And I would say if I could just add my own a little sprinkle on Jim's rhetorical question, how do people come together, the chemistry, the cross functional approach, the ability to be nimble but connect the dots, the vision, the right agenda, all those things come into place and it's a people business, it's all about execution and we think we have good momentum and it will carry through and continue to deliver solid results for both our customers and shareholders.

Steven Paget<http://seekingalpha.com/search/transcripts?term=Steven+Paget&sasource=participant> - First Energy Capital

Well thank you both. That was my question.

Claude Mongeau<http://seekingalpha.com/search/transcripts?term=Claude+Mongeau&sasource=participant>

Thank you so much.

Operator

Thank you. The final question will be from David Newman from Cormark Securities. Please go ahead.

David Newman<http://seekingalpha.com/search/transcripts?term=David+Newman&sasource=participant> - Cormark Securities

I will back clean up here guys. So god forbid but we've got another potential tough winter according to the Farmer's almanac not sure of their crystal ball but obviously your network in Chicago advantage loom large in a congested North American framework and certainly some of the earlier calls today they talked about grid lock and I have to think that given our trip down there recently that you can leverage this for market share gains, some pricing volumes et cetera, associated crude and intermodal. I mean how can you actually, can you quantify the advantage in terms of the top line, your ability to leverage that asset down there, it obviously is quite fluid around that Chicago and it's showing up in all day operating metrics as well.

Claude Mongeau<http://seekingalpha.com/search/transcripts?term=Claude+Mongeau&sasource=participant>

Jim can add a little bit and JJ might want to pitch in, but I think you put it right. It's all about connecting the dots and it's a multi-faceted advantage that we have. From a resiliency standpoint we saw it last year. The ability to connect our own networks in these webs around Chicago is just huge, it's a great asset. We worked hard. It took us many years to negotiate, many years to get the approval, all the work to get it done in terms of integration and we're reaping the benefit of all this hard work in terms of resiliency and services. It's also a huge opportunity from an asset standpoint and efficiency standpoint. We don't have locomotive waiting on either side. We don't have re-crews, we are able to deeply our assets and address the issues elsewhere in our network because it's not like we don't have issues elsewhere.

And so it's cost, it's revenue, it's service and it's who we are and we think it's a great advantage how to quantify that, separately from the guidance and the success we've been having over the years is a bit difficult. This is why we're growing faster. This is why we're growing at low incremental cost. This is why we bounce back quicker when we face adversity. This is why we're back in sync across all our supply chain at the moment. This is why we're in business, it's a big asset.

David Newman<http://seekingalpha.com/search/transcripts?term=David+Newman&sasource=participant> - Cormark Securities

Sure. And just the segments maybe JJ where do you see it the most, does show up in crude by rail for the interchange down to the Gulf Coast, does it show up in intermodal, where does it actually show up in the best for you guys in terms of managing that asset?

Jean-Jacques Ruest<http://seekingalpha.com/search/transcripts?term=Jean-Jacques+Ruest&sasource=participant>

I mentioned that earlier so the frac sand, when we do it, there is a lot of interline business, crude which is also a lot of interline - intermodal obviously because you want to go south maybe Memphis or east to Detroit, lumber long haul. If you any kind of these different industries they try to go through Chicago I think the EG&E Ring Road is lot more attractive for you than a mega merger root canal.

Claude Mongeau<http://seekingalpha.com/search/transcripts?term=Claude+Mongeau&sasource=participant>

And maybe Jim you want to talk about - we're just finishing cutting over, I think this weekend Kirk Yard basically upgraded plan, how we're going to use that to build resiliency.

Jim Vena<http://seekingalpha.com/search/transcripts?term=Jim+Vena&sasource=participant>

Absolutely, Claude. So when we started on the EJ&E we looked at Kirk Yard and tell you the truth it's been sort of our secret little advantage within Chicago is that hump yard now they can handle the traffic. We had 25% of our business touch Chicago, so that's the first piece as we got to be able to get through Chicago and we spent hundreds of millions of dollars to make sure that we've got our infrastructure to be able to handle it. So now we've got Symington and we got this triangle of hump yards, Symington, Mac Yard and Toronto and Kirk Yard and what we've been able to leverage and we will continue to leverage is Kirk Yard can build blocks to bypass Symington.

We have our length to haul and further and the same thing with Winnipeg coming south, we have with the frac sand business that's growing. So when you put in the mix that you got 25% of our business touches Chicago, it cuts the new hump yard that is able to handle more than what that we normally have to handle. We've got a little bit of buffer there help Symington and helps Winnipeg. I think it's a win-win for us and it will help us through the ebb and flow that you normally get with traffic coming into interchange.

David Newman<http://seekingalpha.com/search/transcripts?term=David+Newman&sasource=participant> - Cormark Securities

That's terrific. Thanks guys and let's hope we don't get that winter. Appreciate it.

Claude Mongeau<http://seekingalpha.com/search/transcripts?term=Claude+Mongeau&sasource=participant>

Okay, well thank you. That was a good closing question for us. We are very, very pleased. We have a lot of momentum. If the economy continues to be constructive we should have very solid guidance when we meet you again in January and Luc gave you a little heads up or a little hands up about our focus following this share buyback that we just announced today about our intention to look at the dividend payout ratio and continue to reward our shareholders. So that's the strategy, the game plan is working, the team is firing at all cylinders and we look forward to have you on the call again at the end of the year. Thank you very much.

Jim Vena<http://seekingalpha.com/search/transcripts?term=Jim+Vena&sasource=participant>

Thank you.

Operator

Thank you. The conference has now ended. Please disconnect your lines at this time and thank you for your participation.

Illinois Department of Transportation
Division of Highways / Region 1 / District 1
201 West Center Court / Schaumburg, Illinois 60196-1096

RE: U.S. Route 14 in Barrington

November 13, 2014

The Honorable Karen Darch
Village President
Village of Barrington
200 South Hough Street
Barrington, IL 60010-4399

Dear Village President Darch:

The Illinois Department of Transportation (Department) along with the Village of Barrington has been engaged in the pursuit of a proposed grade separation at U.S. Route 14 and the Canadian National (CN) Railroad. Our Department has enjoyed working with the Village on the phase I that was funded through the U.S. Department of Transportation Tiger II grant with State matching funds. The Environmental Impact Study has now been successfully completed with participation from our partners at FHWA, USEPA, the United States Army Corps of Engineers, CN Railroad, and the Village of Barrington.

It is our understanding that the project currently has a total of $14,012,767 committed to Phases II engineering and Phase III construction of the project through the regionally allocated federally funded Surface Transportation Program (STP) and funds provided by the Department. As discussed, this leaves a funding shortfall of $47 million. The Department is committed to working with the Village of Barrington in efforts to move this project forward. Unfortunately current State budgets at this time do not allow for the programming of funds at this time.

Naturally, the Department is very concerned about the delays and disruptions associated with increased CN Railroad freight rail traffic at the U.S. Route 14 crossing in the Village of Barrington. US Route 14 is a strategic regional arterial and carries 30,800 vehicles per day. In addition, the trains that pass through town are more frequent, with 21 trains per day. This location previously carried up to 5 trains per day and the Department previously had no plans for improvements at this location until after the CN Railroad acquisition.

Based on the likelihood of multiple crossings being impacted by one train, this was the primary reason for the proposed design for a grade separation along U.S. Route 14 contained in the Environmental Impact Study and Design Report.

The complexity of the Barrington situation is very clear. The lack of a grade separation in the downtown area is now causing traffic gridlock in the Village of Barrington. We appreciate the opportunity to discuss the need for this grade separation improvement and will continue to explore potential funding sources.

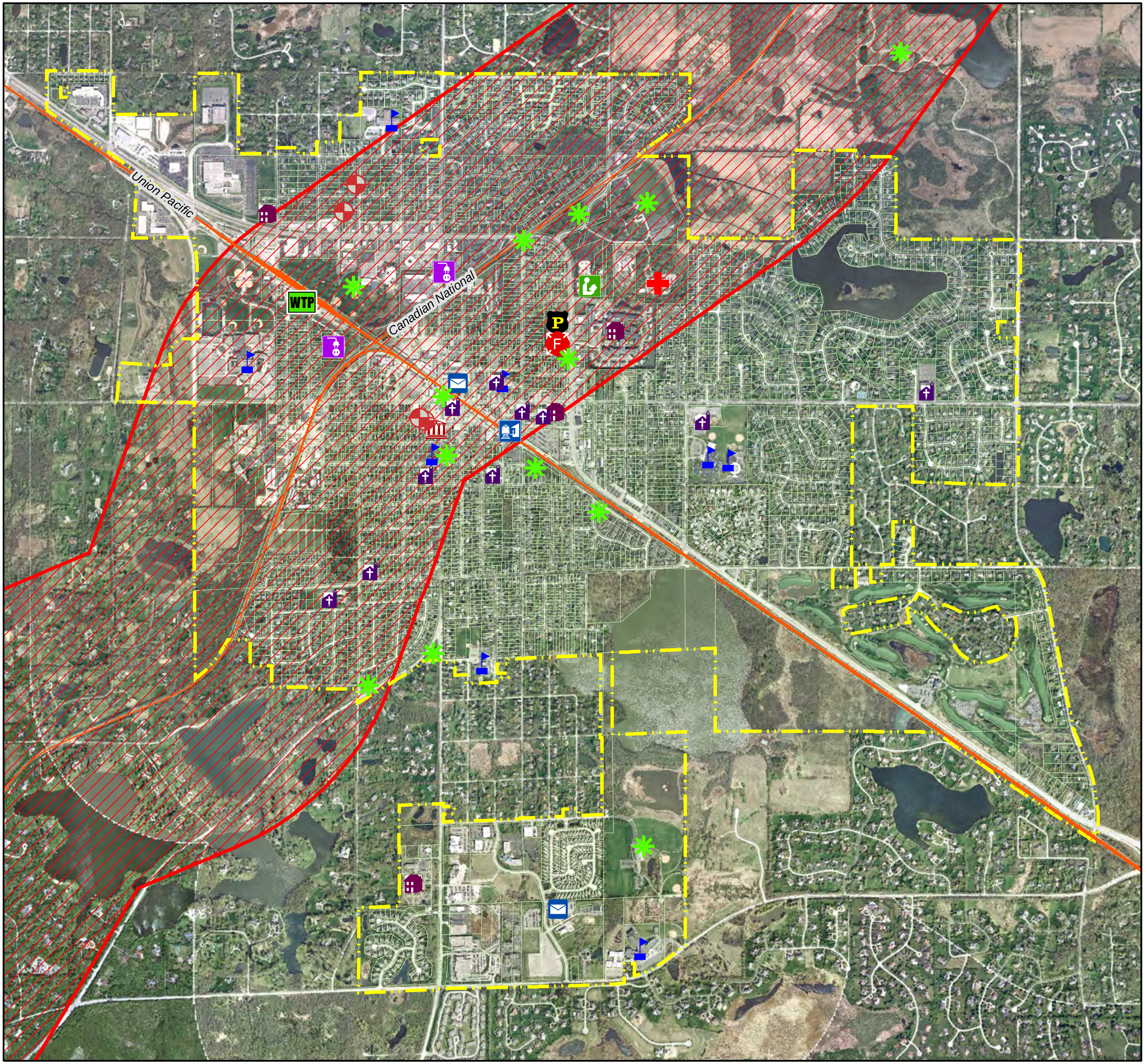
If you have any questions or need additional information, please contact me at (847) 705-4110.

Very truly yours,

John Fortmann, P.E.
Deputy Director of Highways,
Region One Engineer

VILLAGE OF BARRINGTON
a great place to live, work, and play

Half-mile Evacuation Zone



Village Hall - 200 South Hough Street
Barrington, IL 60010-4399
Phone: 847-304-3400
Hours: Mon - Fri: 8:00 - 4:30
www.barrington-il.gov

- Barrington Library
- Fire Department
- Metra Train Station
- Police Department
- Post Office
- Village Hall
- Water Treatment Plant
- Church
- ComEd Substation
- JourneyCare Hospice
- Municipal Water Facility
- Park/Recreation Facility
- Retirement Community
- Schools
- Railroad
- Half-mile Evacuation Zone
- Parcel
- Village Boundary

Number of Barrington parcels in the evacuation zone: 2099

0 0.25 0.5 Miles

N

Projection: State Plane (Illinois East)
Map Units: Feet
Source: VOB GIS, Cook Co., Lake Co.
Date : 11/24/2014

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