

MOVING WILL COUNTY

Truck Routing and Communities Plan Implementation Strategy



September 2021



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Introduction

Overview of Document

The Moving Will County project explores complex and interrelated truck routing and land use issues in western Will County, a region that is managing rapid development in industrial and logistics facilities. This document, the Truck Routing and Community Plan and Implementation Strategy, focuses on trucking issues, and serves as a companion to the Land Use and Transportation Scenarios and Impact Assessment.

The Truck Routing and Community Plan and Implementation Strategy is the result of extensive existing conditions research, literature review, outreach with diverse industry and agency stakeholders, and public engagement conducted between October 2019 and February 2021. This Plan includes the following items:

- Introduces truck routing in Illinois.
- Presents proposed designated Class II truck routes in the study area, as well as locations where large trucks are not preferred to travel.
- Identifies which agencies have responsibility for designating the proposed new truck routes, as well as additional policy action that may be required by these agencies, such as update or removal of truck restriction ordinances.
- Offers guidance for local agencies on how to designate truck routes and restrictions through the IDOT process.
- Identifies capital improvements, ranging from asset condition, modernization, and expansion projects, at both the corridor and site-specific levels. These improvements will facilitate truck travel along the network of existing and proposed truck routes.
- Reviews public policy issues related to trucking, including truck parking and permitting for oversized/overweight vehicles.
- Recommends best practices to mitigate community impacts related to high volumes of truck traffic.

Overview of the Moving Will County Project

The Chicago Metropolitan Agency for Planning (CMAP) ONTO 2050 plan for Northeastern Illinois recommends strategies to maintain the region's status as North America's freight hub, while balancing community concerns and the economic benefits of freight. Western Will County is part of one of the six freight land use clusters that CMAP has identified in the region. This rapidly growing cluster has a strong specialization in modern distribution facilities. Recent intermodal and distribution facility growth, as well as other economic development, has brought both benefits and challenges to the area.

To address these challenges and build on recommendations of the Will County Community Friendly Freight Mobility Plan, CMAP and Will County took on the Will County Freight Studies project (Moving Will County), which brought together a Truck Routing Study and a Land Use Strategy. These studies were combined due to their overlap in geography, data collection, outreach needs, and the interdependency of transportation and development objectives. The joint goal of the studies is to achieve balance between the truck traffic and routing, existing freight land use clusters and new development, agricultural business, natural and cultural resources, and residential neighborhoods and other sensitive areas. Both studies shared resources, including existing conditions and community engagement of stakeholders, to develop appropriate and supportive infrastructure and policies to best guide development and direct truck traffic. The goal for these collaborative solutions is to support economic development and complement communities, agriculture, cultural resources, and natural areas that are critical for Will County to be competitive and resilient.

The Moving Will County project is a planning-level study that includes a large, regional area: both study boundaries together include over 311,000 acres (486 square miles), 19 municipalities, and over 2,500 miles of roadway. For this reason, throughout the project process, the Steering Committee has played a critical role in getting the word out and sharing public involvement opportunities with their community members. They have been an important resource for this regional community engagement effort, as both the Land Use Strategy and Truck Routing study areas are large. The Steering Committee consists of leaders from local municipalities, agencies, as well as associations and nonprofits representing business, environmental and agricultural interests. They reviewed draft deliverables at key milestones in the timeline and provided feedback that was incorporated into revisions. The goal for the future is that they will be partners in implementing the Moving Will County project. Steering Committee members include:

- Will County Land Use Department
- Will County DOT
- IDOT District 1
- Illinois Soybean Association
- Illinois Trucking Association
- Midewin National Tallgrass Prairie
- Mid-West Truckers
- Openlands
- Will County Board
- Will County Center for Economic Development
- Will County Governmental League
- Forest Preserve District of Will County
- Village of Elwood
- Village of Manhattan
- City of Joliet
- Village of Channahon
- Village of Frankfort
- Village of Symerton
- Village of Minooka
- Village of Mokena
- Village of New Lenox
- Village of Rockdale
- City of Crest Hill
- City of Lockport
- Village of Plainfield
- City of Naperville
- City of Wilmington
- Village of Bolingbrook
- Village of Shorewood
- Village of Woodridge
- Village of Homer Glen
- Village of Romeoville

More information on the community engagement conducted throughout the process and project timeline is in **Appendix D. Moving Will County Engagement and Planning Process Overview and Timeline.**

It will be the responsibility of the municipalities, Will County DOT, and IDOT to implement the recommendations. In cases where a new truck route is recommended, further study would be necessary. The Moving Will County studies provide guidance for prioritizing where trucks should travel and industrial/Transportation Distribution and Logistics land uses could be located in the future to minimize impacts, however, the project does not preclude roads from becoming truck routes or land from being developed for industrial as conditions change in the future. For all the specific recommendations, further study would be needed by the municipalities. The purpose for both of these studies is to provide a framework that communities can build on, to target further study and investments in terms of land use and truck routing issues within their municipality. The objective of this regional collaborative effort is to reach consensus among all the study area municipalities, so that everyone is working towards the same goals and considering their neighbors in future developments.

Introduction to Truck Routing

Truck routing is a key tool available to local agencies to direct the movement of truck traffic through their communities. State law in Illinois generally requires larger trucks to travel along designated truck routes, unless making local pickups or deliveries, or accessing food or rest for the driver or fuel for the vehicle. Agencies may also restrict truck traffic from use of their facilities.

Need for Coordinated Truck Routing Network

Will County has experienced tremendous growth in industrial transportation, distribution, and logistics facilities in recent years, and truck traffic has expanded substantially with this development. While improvements have been made and more are planned, the roadway network has not kept pace.

High volumes of truck traffic have led to safety and congestion concerns at many locations throughout the county, particularly in sensitive areas such as historic downtown districts, residential neighborhoods, and critical environmental and agricultural resources. These locations were never planned to accommodate high volumes of truck traffic, leading to a substantial impact on quality of life for local residents and businesses.

As identified in the Will County Community Friendly Freight Mobility Plan (2017), there is a lack of a continuous system of designated truck routes in the region. As a result, many truck drivers are unsure where they are allowed to travel, and the few major corridors that are officially designated as truck routes suffer from poor performance and asset condition. By developing a coordinated truck-route system, as well as an investment plan to improve these routes to better accommodate trucks, these issues can be minimized.

Impact of Truck Route Designation

Illinois state statute allows local highway jurisdictions to define both truck routes and truck restrictions. The former defines lawful access for trucks based on length and allows for reasonable access from a designated truck route along undesignated facilities in certain cases. The latter allows jurisdictions to prohibit truck access from a facility, either categorically or by a weight limit, but requires posting of that truck restriction for it to be valid. Several of MUTCD's weight limit signs are shown in **Figure 1**.

Figure 1. MUTCD Weight Limit Signs



The statute governing truck routes was recently amended, with new definitions in effect as of January 1, 2020¹. The effect is to simplify truck routing, reducing the number of categories from five to three²:

- “Class I” refers to designated truck routes on expressway facilities
- “Class II” refers to designated truck routes on all other facilities
- “Undesignated” refers to facilities that are not truck routes.

In addition, the changes generally allow a truck tractor-semitrailer combination up to 65 feet in length on all roadways, regardless of designation as a truck route. Prior to the new statutes, state law had allowed general access for trucks up to 55 feet in length on undesignated roadways. This change reduces the benefit of formal designation of a roadway as a Class I or II truck route for many trucks. **Figure 2** depicts a few common examples of common truck sizes.

However, designation of Class I or II truck routes still has bearing on reasonable access for combination vehicles exceeding 65 feet in length. Larger trucks, such as those that move much of the economically significant freight across the region, exceed this 65-foot length when hauling a standard 53-foot long container. Those vehicles may travel from a Class I or Class II designated truck route onto any non-designated highway for a distance of five highway miles for the purpose of loading, unloading, food, fuel, repairs and rest if:

- There is no sign prohibiting that access; and
- The route is not being used as a “thoroughfare” between Class I or Class II highways³⁴.

¹ Public Act 100-0343

² Former categories were Class I, II, III, locally preferred truck routes, and undesignated. Current categories are Class I, II, and undesignated.

³ IDOT OPER 753, updated February 5, 2020. Available online: <https://idot.illinois.gov/Assets/uploads/files/IDOT-Forms/OPER/OPER%20753.pdf>.

⁴ Public Act 101-0328

Figure 2. Examples of Common Truck Sizes



IDOT staff interprets this “thoroughfare” provision to mean that trucks must use the first Class II truck route they encounter when traveling within this five-mile distance, even if the route is less direct for the truck driver.

For local agencies, designation of truck routes requires compliance with IDOT’s internal processes to ensure that truck routes are properly designated and reported to the statewide database. That database is used to publish a statewide truck route network on the IDOT website, GettingAroundIllinois.com, and is also provided by the State to private providers of truck navigation systems. As a result, the official designation of a truck route has a direct application to the travel directions commonly used by many truck drivers. Penalties for non-compliance with the state’s truck-routing law are fees of between \$50-\$500 for the first and second offense, and fees of between \$500-\$1,000 for the third and all subsequent offenses⁵.

⁵ 625 ILCS 5/15-113

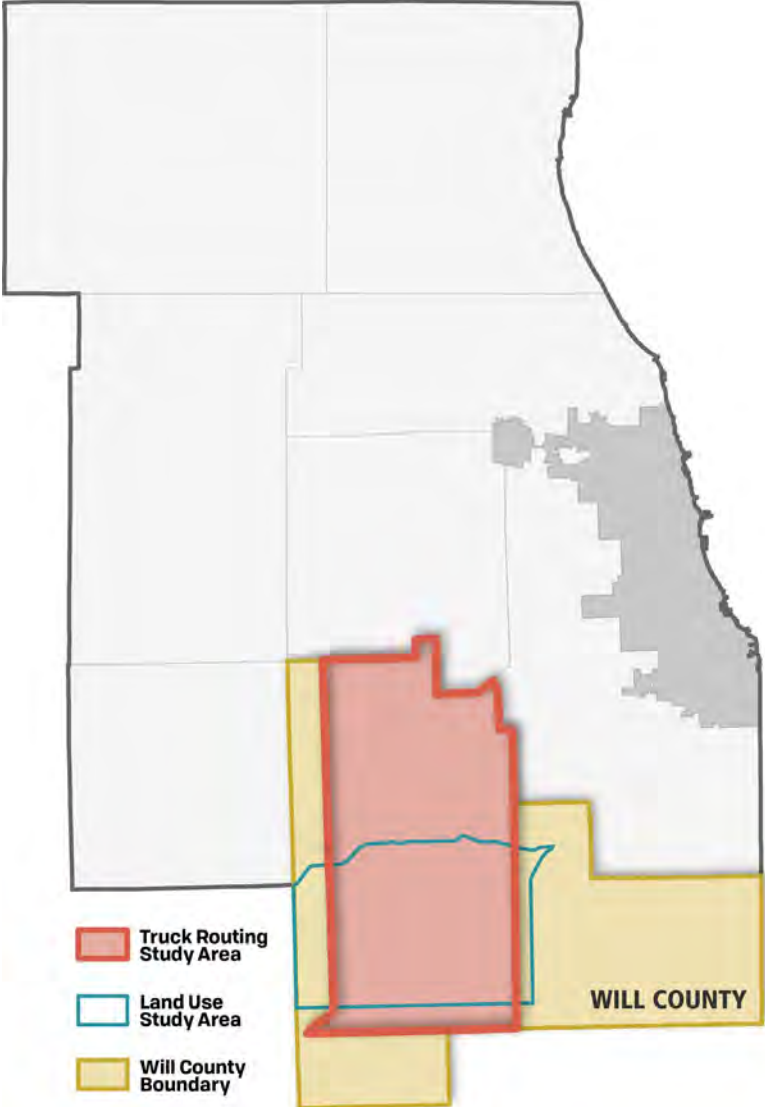
Recommended Truck Routes

Existing Truck Route Network

The existing truck route network in the study area includes over 65 miles of Class I designated truck routes along IDOT or Illinois Tollway jurisdiction expressway facilities (I-55, I-80, and I-355), along with 20 miles of IDOT jurisdiction Class II truck routes along various arterial roadways. The latter include IL 53, IL 59, and IL 171, key north-south corridors throughout the study area, as well as IL 7, US 6, and US 30, key east-west corridors. It also includes a segment of Arsenal Road between I-55 and Elwood International Port Road/Baseline Road, which provides access to the Union Pacific and BNSF intermodal yards and the CenterPoint logistics park.

Prior to 2020, there were relatively few local agency-jurisdiction designated truck routes in the study area. Those included facilities that served the CenterPoint development in Elwood, Laraway Road west of IL 53, which provides a second access point to the intermodal yards and CenterPoint development. Taken together, state- and local-jurisdiction designated truck routes provided a limited network for legal truck access for the largest trucks, serving some major generators of truck traffic and longer-distance travel corridors, but not all, including some in developing areas of the County.

In February 2020, the Will County Board approved the designation of over 26 miles of county-jurisdiction roadways as Class II designated truck routes⁶, most of which are located in the study area. Major newly designated corridors include Weber Road, a key north-south facility serving major industrial districts along I-55 and in Romeoville and providing connections to an existing truck route on US 30, as well as segments of Gougar Road and Laraway Road, which together provide access from I-80 (via US 30) to a growing area in the southern part of the study area. These



⁶ Will County Board Resolution 20-44

newly designated facilities improve the connectivity of the regional truck route network, as well as direct access to local industrial areas.

Approach for Identifying Additional Routes

The intent of the proposed truck routes is to lay out a congruous, interconnected Class II network where major truck traffic generators, such as the intermodal facilities and major industrial sites, are linked to the arterial network and interstates in the region. As a result, the recommended truck route network includes many local jurisdiction roadways that serve as the direct first- and last-mile connector for freight-generating land uses. Additional analysis and consideration was applied to several arterial facilities that connect first- and last-mile facilities to the regional transportation system.

Potential corridors to be designated as truck routes were identified based on recent data for truck volumes, origins, and destinations, as well as truck delay, asset condition, and safety data. These transportation system datasets were combined with a detailed review of land use data and recent satellite imagery. In addition, planned and programmed transportation projects were considered, and the recommended truck routes were refined through multiple iterations of edits with IDOT, Will County, local agencies, CMAP, and the Moving Will County Steering Committee. Revisions were also made based on public feedback received through the project's public open house, website, and the public commenting period.

Specific events include interviews and focus groups held in the field on February 21, 2020; Steering Committee meetings held on April 28, 2020 (for southern communities), April 29, 2020 (for northern communities), and May 6, 2020 (for stakeholder groups); a public agency review period for preliminary draft recommendations in July 2020; a public virtual open house held August 13, 2020; and a public comment period that extended from late August to mid-September 2020. Additional one-on-one calls and committee presentations to various groups were made throughout the course of the Moving Will County study.

Overview of Recommended Truck Route Network

Figure 3 presents an overview of proposed designated truck routes in the study area. In addition to the overview map, **Figures 4 through 6** include detailed maps for the north, south, and central portions of the study area.

The proposed Class II truck routes are divided into two groups, short-term Class II and long-term Class II designated truck routes:

- **Short-Term Class II:** These facilities are currently undesignated or restricted to trucks and are *recommended* to be designated as Class II truck routes **within five years**. These facilities were primarily identified based on existing land use patterns and connectivity to existing Class I and Class II designated truck routes. The goal of this proposed network is to balance access to truck-intensive land uses and mobility for large trucks across the study area. As a result, this category includes both large arterial roadways and local roadways within industrial districts or providing connections to intermodal facilities. The majority of the proposed Class II designated truck routes fall into this category.

- **Long-Term Class II:** These facilities are also currently undesignated or restricted to trucks and are *recommended* to be designated as truck routes **beyond the next five years**. This category includes existing facilities that are not currently required to facilitate regional truck movement but are anticipated to play a key role in the future as industrial development and travel patterns change. It also includes facilities that are not yet built but in various stages of the project development process.

The map includes the “Conceptual Alignment for Long-Term Class II” truck route category. That category includes major new arterials or corridors that are under consideration for development, and could have a larger, regional impact on truck travel, but additional study is required to confirm alignment and design.

For the purposes of the Moving Will County study, two additional categories of “Undetermined” and “Trucks Not Preferred” are used to provide additional detail for planning purposes. These categories directly correspond to the official truck routing and restriction categories, per state law, as described below.

The map also includes an “Undetermined” category. In that case, there is not yet consensus among stakeholders on whether to include a facility as a designated Class II truck route. These facilities may already serve substantial volumes of truck traffic, but community concerns related to safety, congestion, and incompatible land uses preclude a recommendation for official designation as a truck route at this point. Additional planning work, potentially including alternatives analyses, is recommended for these facilities. In the current state statutory framework, these facilities would be undesignated facilities until further action.

Finally, the map includes a “Trucks Not Preferred” category. This category includes facilities that would be either undesignated or restricted to trucks under the current state statutory framework. The majority of these facilities are local roads in residential or agricultural areas, both of which are sensitive land uses not expected to generate substantial levels of truck traffic. Others are collectors or arterials, but do not serve truck-generating land uses or play a key role in connectivity across the study area. The Moving Will County study focused on the identification of truck routes, rather than restrictions, and so did not comprehensively review this large set of facilities to recommend a classification as either undesignated or restricted.

Figure 3. Study Area-Wide Map

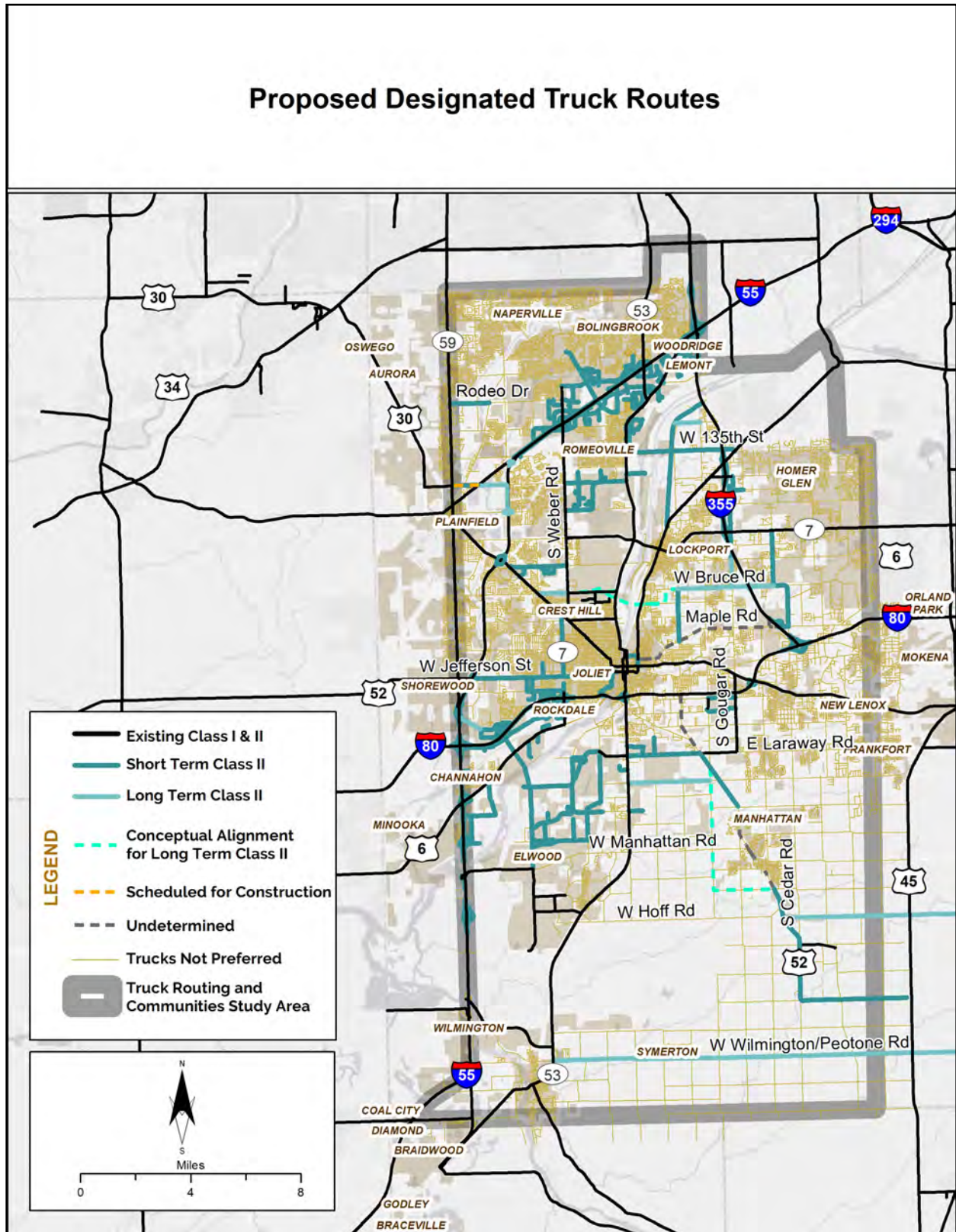


Figure 4. Northern Study Area Detail Map

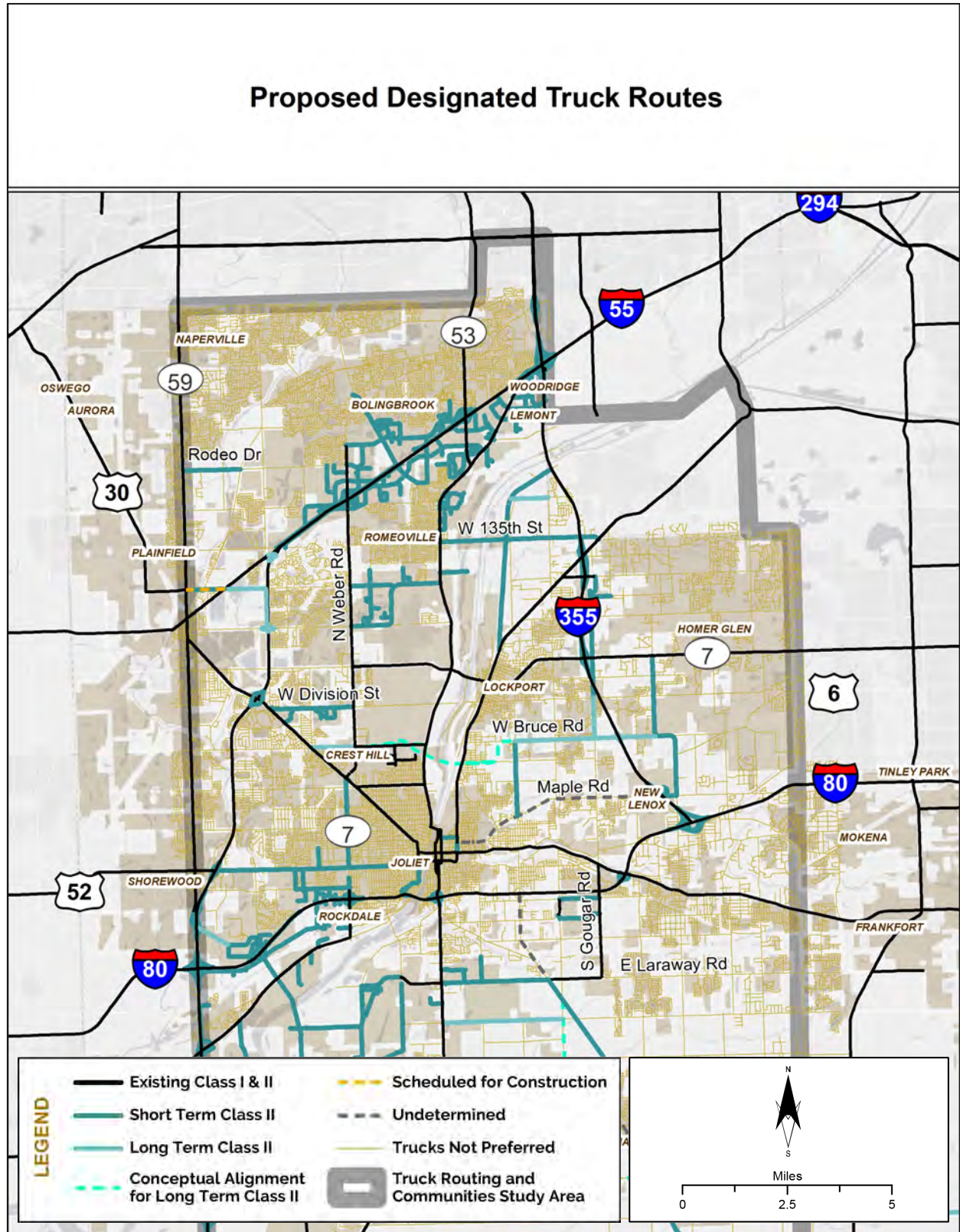


Figure 5. Central Study Area Detail Map

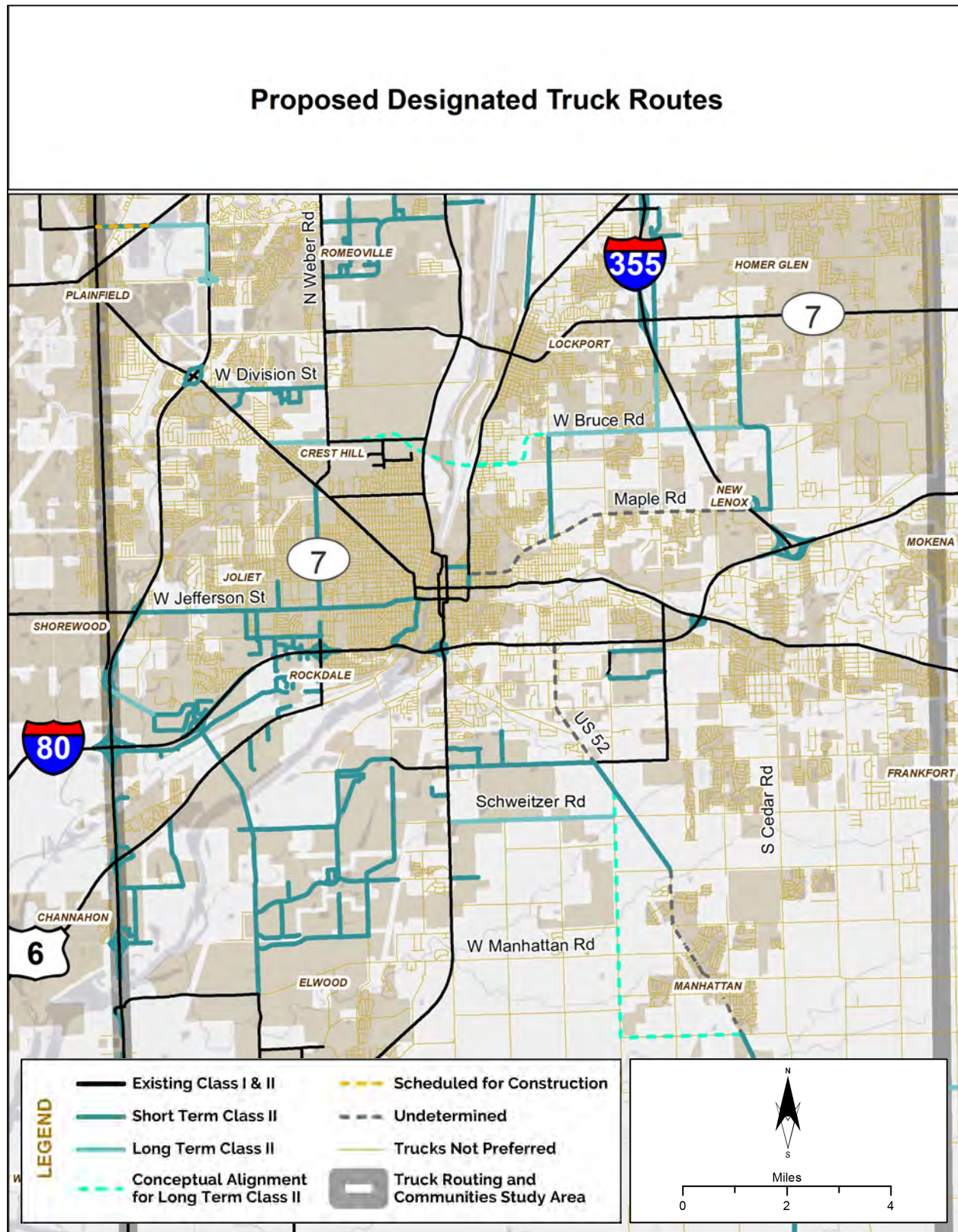
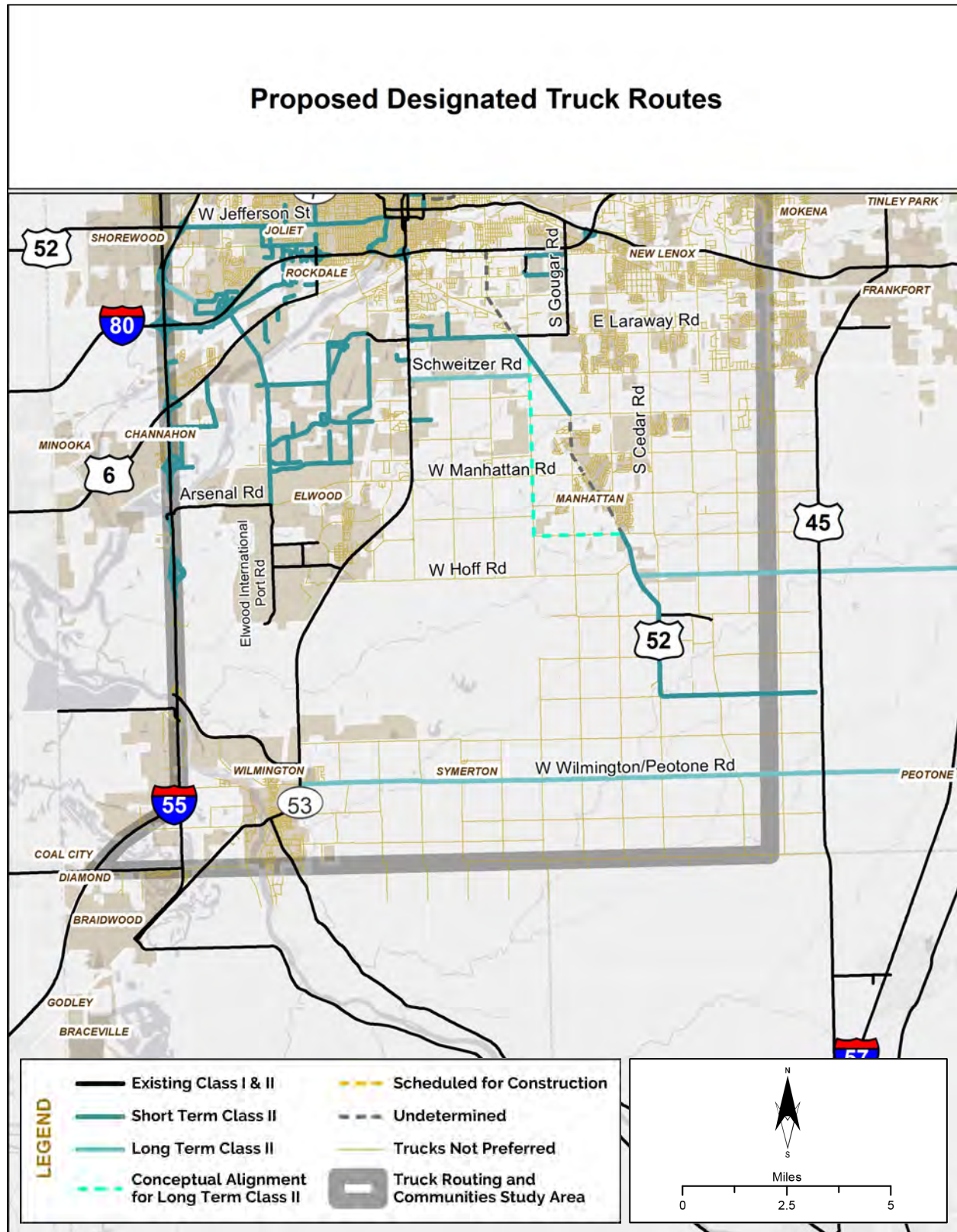


Figure 6. Southern Study Area Detail Map

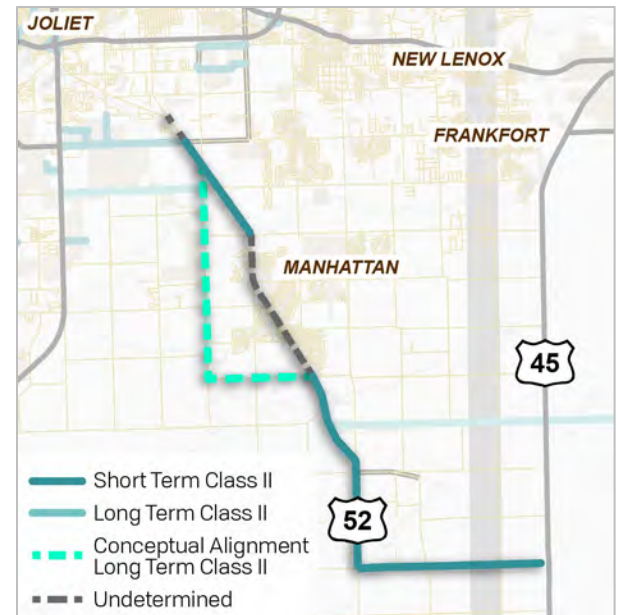


Key Corridors

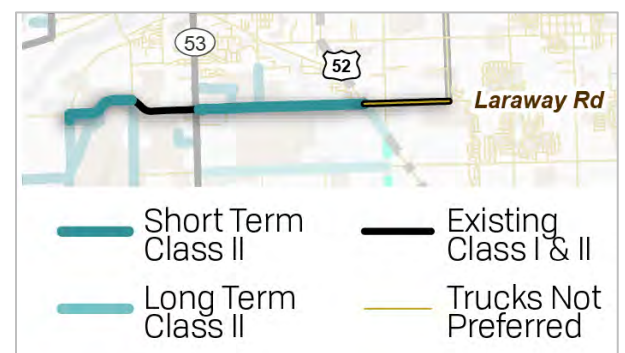
Description of Key Corridors

Several corridors within the study area play a particularly key role in goods movement, and as a result are important to designate as Class II truck routes. These corridors provide access to freight-generating land uses, and also connectivity to major arterials and the Interstate system. Unless otherwise noted, data on average annual daily heavy commercial vehicle traffic comes from the Highway Performance Monitoring System (HPMS) dataset, released in October 2018. Key proposed Class II designated truck routes include the following:

- **US 52** is a major IDOT jurisdiction arterial and runs diagonally from the northwestern to the southeastern parts of the study area. It provides regional access to Joliet and I-80 from more rural areas, as well as connecting to I-57 east of the study area. Volumes range from 270 to 1,025 trucks per day, with the highest volumes occurring just north of Laraway Road. US 52 is currently neither a designated truck route nor restricted for truck movements but portions of US 52 south of Laraway Road would be suitable to be a designated Class II truck route in the long-term, in concert with a proposed new US 52 bypass to the west and south of the Village of Manhattan. The existing segment of US 52 within the Village of Manhattan (from Baker Road to Bruns Road) is shown as “undetermined” to reflect the difficulty of integrating truck movements within the Village. This is due to conflicts with neighboring schools and other land uses, as well as the geometrics and alignment of the roadway within the historic core of the Village. South of the downtown, US 52 is recommended as a short-term Class II designated truck route, connecting to the existing designated truck routes on Elevator Road and US 45.

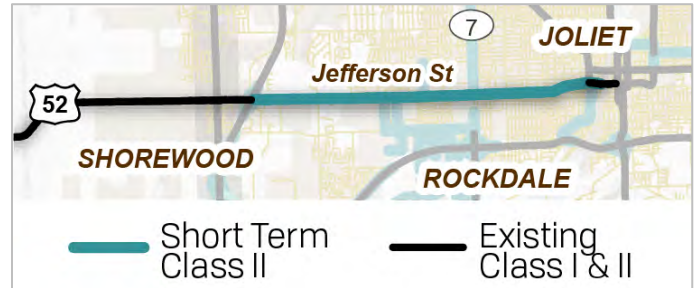


- **Laraway Road** is another key corridor in the study area, running east-west in central Will County where it provides connections to IL 53, US 52, and US 45. It is, along with Arsenal Road, one of two access points to the intermodal district, which is a major truck trip generator in the study area. A small section just west of IL 53 is currently classified as a Class II truck route, as is the segment between US 52 and Gougar Road. The intervening segment is recommended to be designated as a Class II truck route. Laraway Road is a county highway east of US 52, while the section west of US 52 to IL 53 is under the City of Joliet’s jurisdiction. According to the

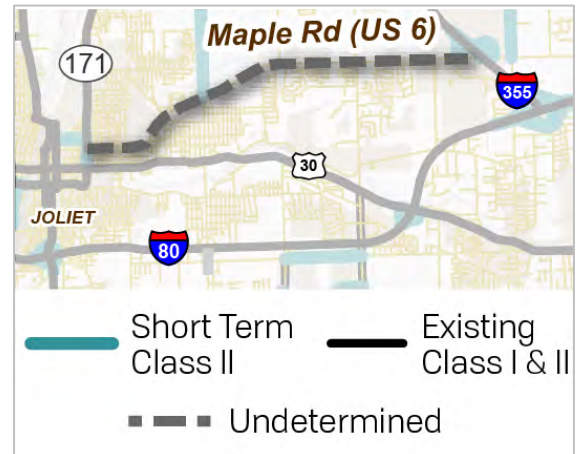


Illinois Roadway Information System, daily truck counts on Laraway Road were 1,350 west of US 52 and 525 east of US 52 in 2019. West of Illinois Route 53, CMAP counted 6,562 trucks during a 24-hour count on Laraway Road. The City of Joliet desires a jurisdictional transfer to IDOT for this corridor.

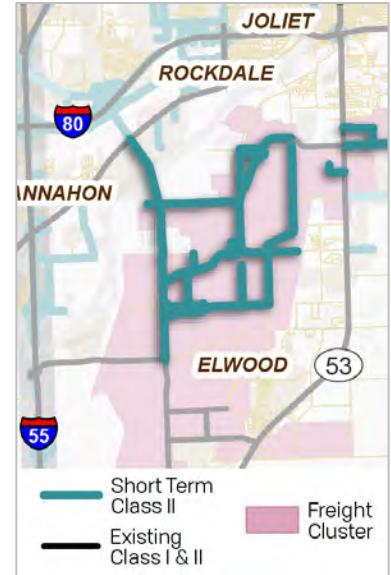
- Jefferson Street (US 52)** provides access to I-55 from Joliet and gives access to IL 7. Jefferson Street serves older, smaller industrial land uses west of downtown Joliet, as well as regional retail uses and Joliet Regional Airport. A moderate amount of truck traffic uses this segment, approximately 400 trucks per day east of IL 7 and around 1,200 west of IL 7. Along with IL 7/Larkin Avenue, Jefferson Street provides connectivity among Class II truck routes in the Joliet area.



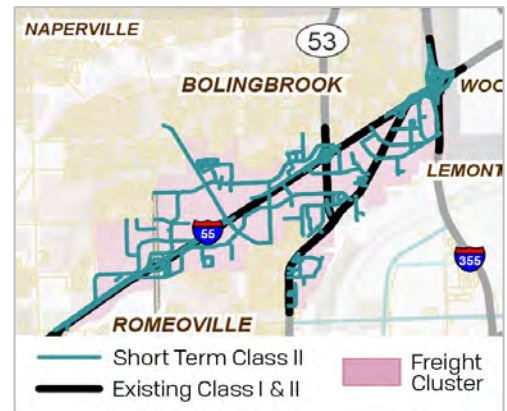
- Maple Road (US 6)** is another IDOT-jurisdiction highway that would benefit from further study from its intersection with IL 171 to I-355. This segment could provide additional connectivity among Class II truck routes in the Joliet area, providing a direct connection between I-355 and downtown Joliet, and, along with US 30, providing a second arterial alternative to I-80. However, there are land use constraints along the corridor, including the Silver Cross Hospital and Medical Center complex, which is a regional destination and trip generator for light vehicles in the area. Establishing a truck route along this corridor could present safety challenges to people accessing the hospital as well as emergency responders. Therefore, the route is classified on the map as “Undetermined” since further study of alternatives is needed as this segment also serves smaller-scale legacy industrial uses just east of downtown Joliet, as well as the Canadian National’s Joliet Intermodal Terminal. According to the Illinois Roadway Information System, daily truck counts on Maple Road in 2019 were about 250-300 near downtown Joliet and about 100 near I-355.



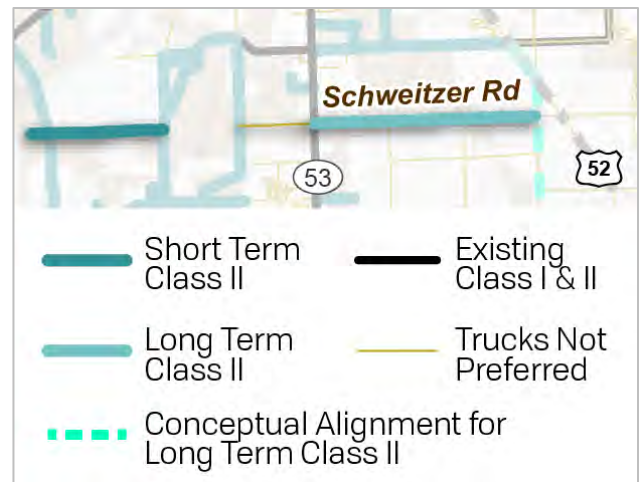
- The **intermodal district** between Joliet and Elwood has several roads that are suitable for designation as Class II truck routes, given the major truck trip generators at the intermodal yards and associated distribution centers. Class II designation for these facilities will ensure lawful access for larger trucks for the critical first- or last-mile movement. Many of these roads are recently improved by CenterPoint Properties or planned for near-term improvements in conjunction with the new Houbolt Road extension and new Des Plaines River bridge. That project will provide an alternative access point to the intermodal district from I-80 to Schweitzer Road and Vetter Road, which will help alleviate congestion at the two existing access points. Local roads in this area are under the jurisdiction of the City of Joliet or Village of Elwood; there are also private roads in this area, which provide access to individual developments.



- The **Bolingbrook-Romeoville industrial district** generates high volumes of truck traffic travelling to and from the large industrial uses along I-55 and I-355. By designating these local facilities as Class II truck routes, lawful access for larger trucks is ensured for critical first- and last-mile movements. Most of these roadways are under Bolingbrook’s jurisdiction north of I-55 and under Romeoville’s jurisdiction south of I-55.

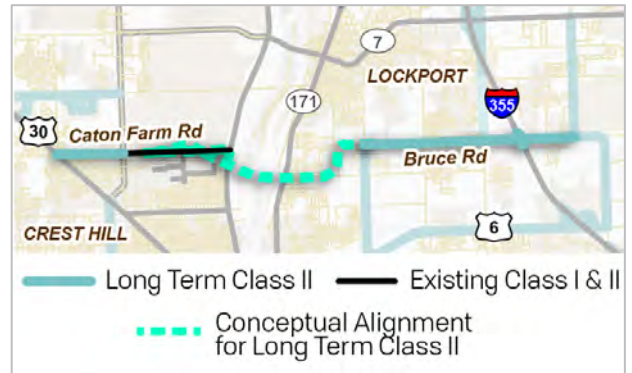


- **Schweitzer Road** is recommended to be designated as Class II truck route in the longer term if large-scale industrial development in the southern portion of the study area warrants additional access. According to the GettingAroundIllinois.com website, truck counts on this segment of Schweitzer Road were a maximum of 60 trucks per day in 2012. Schweitzer Road would be an important access point for future development east of IL 53, and would provide connectivity to IL 53 and US 52, the only two north-south arterials in this area. It would also be most suitable as a future Class II designated truck route in conjunction with a new Class II truck route along a proposed US 52 bypass of the Village of Manhattan’s downtown. That bypass is currently in a conceptual phase, and could follow an alignment that roughly follows



Cherry Hill Road for the north-south segment and Hoff Road for the east-west segment. This southern portion of a potential future bypass will need to be designed to avoid and mitigate potential impacts on sensitive environmental areas, principally Midewin National Tallgrass Prairie, located to the south and west.

- The planned **Caton Farm Road/Bruce Road Corridor** could have regional impacts on travel patterns. Although intended to largely serve passenger car traffic, the facility will be built to accommodate larger trucks. The corridor would provide a new east-west corridor in the northern portion of the study area, providing a critical additional Des Plaines River crossing. As a result, it could help mitigate traffic congestion on the existing 9th Street bridge in Lockport, which is an existing Class II truck route (IL 7). The project is currently in the Phase I preliminary engineering phase led by the Will County DOT. In June 2019, the Will County Board approved the corridor alignment along Caton Farm Road, Oak Avenue, Bruce Road, and Gougar Avenue. As of January 2020, it is estimated that the completion of the Phase I study will take 2-3 years, including design development and review, public meetings, and other tasks. Parallel with the Phase I study, a federal environmental review process (Concurrent NEPA/404 Process) is underway. There are additional environmental considerations for this corridor as identified by Openlands in **Appendix F: Stakeholder Comments**. These considerations should be revisited when implementing the truck route corridor.



Downtown Challenges

Often, IDOT-jurisdiction facilities serve as the main streets of a historic downtown. The heavy truck traffic on these facilities, especially those that are also designated Class II truck routes, raises safety and congestion concerns. In downtown Lockport, for example, right-turns are a major problem for large trucks, with trailers mounting the sidewalk or swinging out into oncoming traffic. The constrained right-of-way in the historic district makes it difficult to add capacity or reconfigure the geometrics of the intersection.

As a response to this issue, these communities are working on plans to reduce the impact of heavy traffic travelling through downtown areas while ensuring that commercial traffic can still flow through the region. In some cases, the communities seek to redesignate state-jurisdiction roadways, and the Class II truck route designations on them, to alternate routes. In other cases, the community is interested in developing new roadway segments for trucks to bypass downtown areas entirely.

Figure 7 shows the de-designated truck routes for the downtown areas discussed below.

- The Village of Manhattan is interested in removing the US 52 designation through its historic downtown and residential neighborhoods to a new bypass to be built south and west of the

village. Today, US 52 runs adjacent to restaurants, banks, small businesses, two schools, and a church along a constrained right-of-way in downtown Manhattan. In the truck routing maps, the bypass is shown to roughly follow the Cherry Hill Road and Bruns Road alignments, but additional study and stakeholder engagement is needed to determine the most appropriate route. There are additional environmental considerations for this corridor as identified by Openlands in **Appendix F: Stakeholder Comments**. These considerations should be revisited in future phases of the project, including a future engineering feasibility/impact study. Local roadways in the area of the proposed bypass currently traverse sensitive natural areas along Jackson Creek, farms, and residential areas. These land uses could be affected by increased commercial traffic associated with the new alignment of US 52. In addition, existing roadways in that area have narrow lanes, no shoulders, and in some segments are unpaved. Therefore, of course, a truck route designation would require substantial capital investments in the highway infrastructure to support heavy truck traffic.



Historical Downtown of the Village of Manhattan | Source: Manhattan Township Historical Society

- The City of Lockport is interested in rerouting trucks away from the historic downtown. Specifically, the City has studied the feasibility of removing the IL 7 and IL 171 designations from State Street and 9th Street, respectively, and reassigning those designations along Gougar Road, Bruce Road, and other facilities, including the planned Caton Farm Road/Bruce Road corridor and potential new interchange of Bruce Road and I-355, to bypass downtown Lockport. As part of this redesignation, the former IL 7 and IL 171 segments in the downtown area would have their jurisdiction transferred from IDOT to the City, and the newly designated segments would be transferred from the City to IDOT.



Historical Downtown of the City of Lockport | Source: City of Lockport

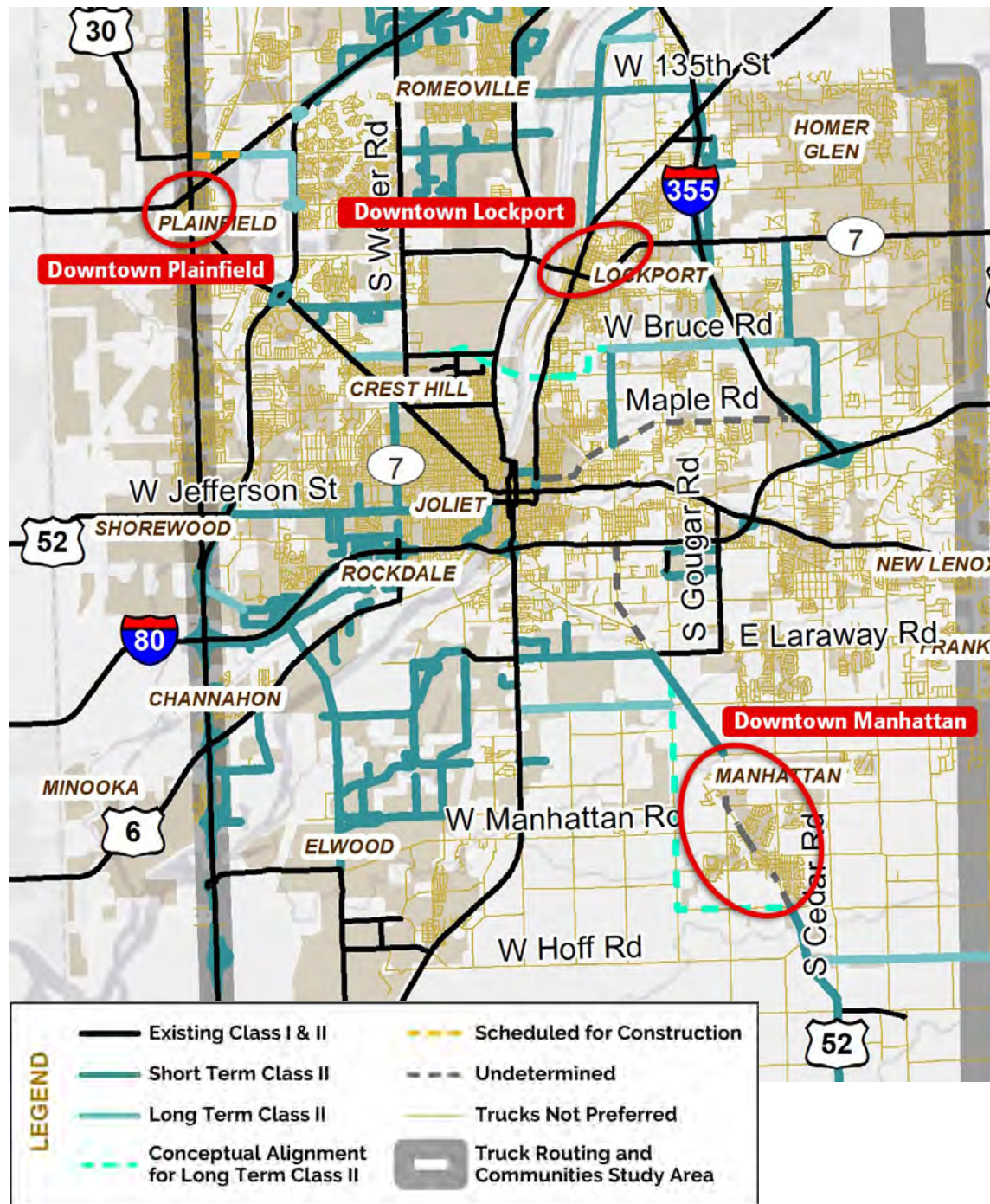
- Plainfield prefers to direct truck traffic away from its historic downtown by extending 143rd Street, located approximately one mile north of the village core. A new segment of 143rd Street between IL 59 to IL 126 is funded and currently in Phase II design engineering, programmed for construction in 2022 and opening to traffic in 2023. Additional planning efforts are underway to further extend the 143rd Street corridor to a new interchange proposed at I-55 and Airport Road/Lockport Street. One alignment of that corridor would extend along the existing segment of 143rd Street from IL 126 to the frontage road just west of I-55, then along the frontage road to a new interchange. This connection from the new interchange to 143rd Street is required to avoid truck travel along Lockport Street through sensitive land uses, including natural areas, residential neighborhoods, and a school. These improvements complement new ramps planned at the existing I-55/IL 126 interchange to the north.



Historical Downtown of the Village of Plainfield | Source: Village of Plainfield

In the above examples, main streets through historic downtown areas are under IDOT jurisdiction, and some of those facilities are currently designated as Class II truck routes by the state. IDOT works with local communities on a case-by-case basis to address the potential realignment of state facilities, or designation of alternate corridors as state routes. Typically, a Class II truck route designation on a former state route would be transferred to the new alignment. Jurisdictional transfers, in which ownership of a roadway is transferred from one agency to another, are an option, and also determined on a case-by-case basis.

Figure 7. Locations of De-Designated Truck Routes in Downtowns



Key Corridors to Restrict from Truck Traffic

While the recommendations focus on proactively designating Class II truck routes and does not go into detail on corridors where trucks are not preferred, a few corridors have been identified by local stakeholders as important to restrict from truck traffic. **Figure 8** shows the de-designated truck routes for key corridors discussed below. These locations include the following:

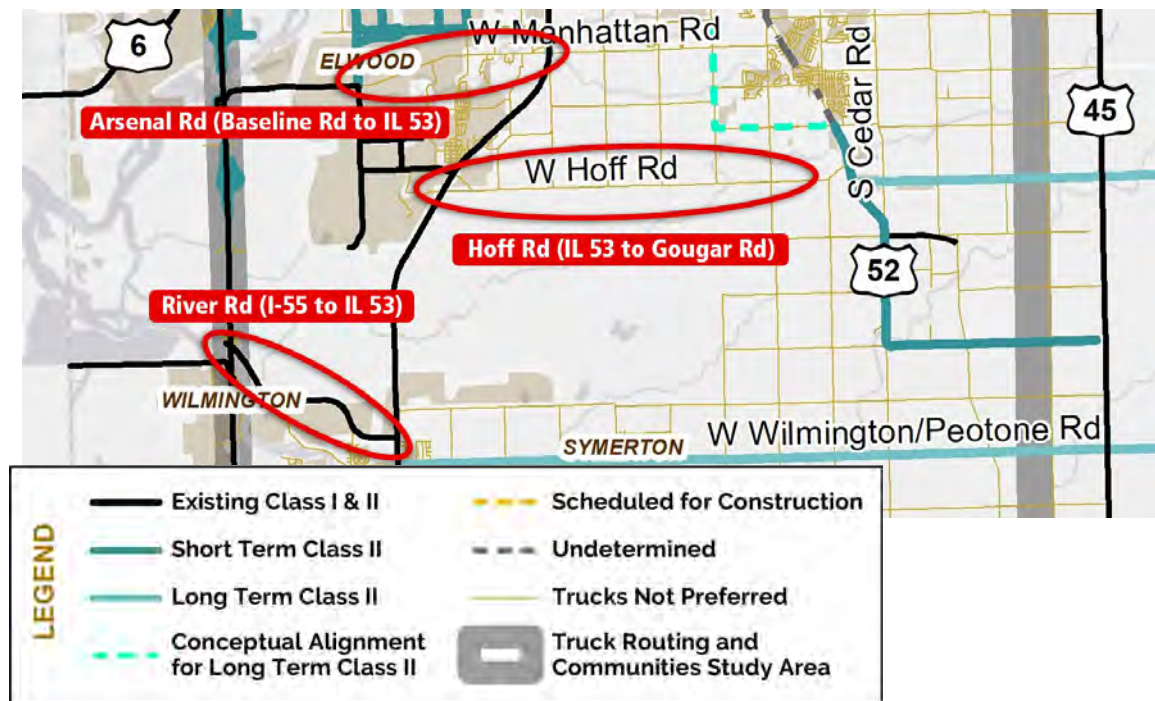
- **Hoff Road.** Hoff Road runs east-west in the southern part of the study area just north of the Midewin National Tallgrass Prairie, which owns right-of-way under the facility. Due to the limited truck traffic, narrow pavement, lack of shoulders, and potential for impacts to sensitive natural areas, a truck restriction is recommended for the segment of Hoff Road between IL 53 and Gougar Road. Hoff Road is under WCDOT’s jurisdiction from IL 53 until the Wauponsee Glacial Trail just west of Gougar Road. During community engagement, stakeholders identified that truck drivers erroneously turn into the Abraham Lincoln National Cemetery, which causes damage and creates safety issues for visitors. In addition to considering the restriction of truck traffic on Hoff Road, which leads to the cemetery west of IL 53, other solutions to mitigate the issues should be considered, including: establishing the restriction of Hoff Road to truck traffic in the IDOT database; coordinating with IDOT, WCDOT, and the Village of Elwood on improved and additional wayfinding signage to guide truck traffic away from the corridor; and working with the Federal government to explore quick and efficient exit solutions for when trucks erroneously enter the cemetery. Safety-related grants can be pursued for these projects—See Table 3. Summary Matrix of Funding Opportunities for some options.



Abraham Lincoln National Cemetery | Source: The Cultural Landscape Foundation (photo by Joe Karr)

- **Arsenal Road between Baseline Road/Elwood International Port Road and IL 53.** This segment is currently under a five-ton weight restriction to prevent heavy traffic near Elwood, IL. This part of roadway is narrow and of varying pavement quality and is under the jurisdiction of WCDOT. It also serves residential land uses, which are unsuitable for the potentially high volume of truck traffic that might otherwise use this facility to access the intermodal yard from IL 53.
- **River Road between I-55 and IL 53.** Similar to that of Hoff Road, Midewin National Tallgrass Prairie owns right-of-way under River Road, and, due to the potential for impacts to sensitive environmental resources, this segment is recommended to be restricted to truck travel. It is under WCDOT’s jurisdiction and currently classified as a Class II truck route. In 2019, this segment of River Road carried 9,250 vehicles a day, on average. In addition, a total of 2,625 vehicles were trucks, including 1,950 multi-unit trucks and 675 single-unit trucks.

Figure 8. Locations of De-Designated Truck Routes on Key Corridors to Restrict Trucks



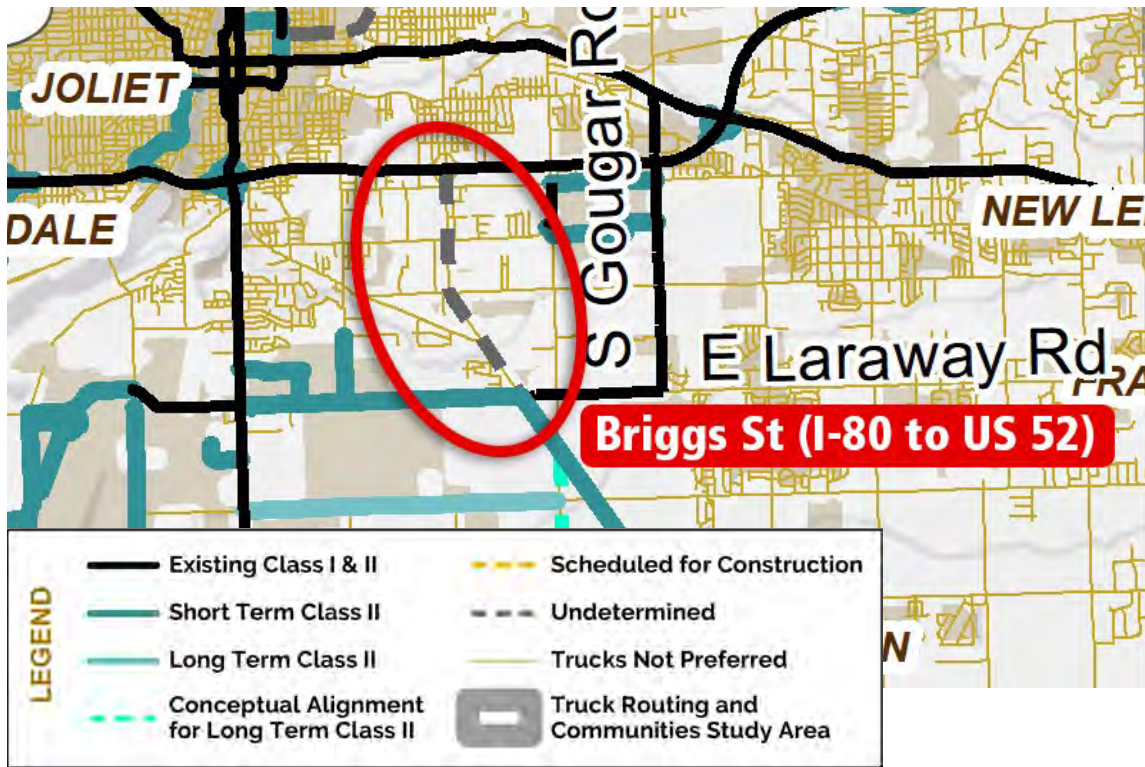
Additional Planning Considerations

In the course of the Moving Will County study, additional planning considerations were identified for Briggs Street between I-80 and US 52 in the central portion of the study area (see **Figure 9**).

Designating Briggs Street between I-80 and US 52, as well as US 52 from Briggs Street to Laraway Road, is considered “undetermined” for this study due to challenges with integrating truck volumes with conflicting and sensitive land uses, which was highlighted during the public commenting period with a large volume of comments from community members. These include several places of worship, the Smith Family YMCA facility, a bank, an East Joliet Fire Protection District station, and residential areas. In its current, undesignated classification, Briggs Street between I-80 and US 52 already carries substantial commercial traffic based on existing land use and traffic patterns. According to an August 2019 traffic count, some 1,500-1,900 longer vehicles – those exceeding 39 feet, largely commercial trucks – legally used this corridor daily.

A Class II truck route designation of this section of Briggs Street could alleviate the IL 53/I-80 interchange by absorbing some of the commercial traffic intended for I-80. The City of Joliet’s preference is for the corridor to be a truck route. According to March 2019 traffic counts, about 5,300 longer vehicles – i.e., those exceeding 39 feet in length, largely commercial trucks – used the portion of IL 53 between I-80 and Laraway Road. Over 150 truck crashes occurred on the approximately 1,500 feet section of IL 53 just south of the I-80 interchange between 2014 and 2018, 18 of which involved injuries. This section of IL 53 is also one of the most congested in the entire study area, with between 10 and 13 hours per day of truck congestion in 2018. The tight right-of-way conditions along IL 53 between I-80 and Mills Road, including two railroad viaducts, a bridge over Hickory Creek, and Nowell Park, result in relatively high costs for a potential capacity expansion project. More study is needed to determine an appropriate alignment or mitigation.

Figure 9. Locations of De-Designated Truck Routes on Briggs Street



Guidance and Considerations

Guidance on Implementation of Truck Routes

Table 1, Table 2, Table 3 and **Appendix A** present the recommended changes in designation by jurisdiction required to implement the proposed Class II designated truck network in the study area. **Table 1** summarizes facilities under IDOT jurisdiction, **Table 2** presents recommended changes on Will County jurisdiction facilities, **Table 3** presents recommended changes on local facilities, and **Appendix A** summarizes municipal jurisdiction roadways. Information on restrictions comes from local ordinances and other sources from municipalities in the study area.

Changes in Designation by Jurisdiction

This section presents a series of tables itemizing roadway segments recommended for designation as Class II trucks routes. Each table is organized by agency of jurisdiction, and indicates if a truck restriction applies to that segment, based on review of local ordinances conducted as part of the project's Existing Conditions Report. Truck restrictions defined in ordinance may be invalid if applied to roadways beyond a local agency's jurisdiction (e.g., a municipal ordinance imposes a truck restriction on county- or state-jurisdiction roadways). Given the large number of municipalities in the study area, detailed municipal tables can be found in Appendix A of this document.

Table 1. Changes in Designation for IDOT Facilities

Street Name	Jurisdiction	From	To	Term	Change in Designation
IL 171	State/IDOT	E Jackson St/ US 6/ Maple Rd	US 30/ E Class St	Short	From Undesignated/ Restricted to Class II
N Larkin Ave/ IL 7/ US 52	State/IDOT	US 30	US 52/ W Jefferson St	Short	From Undesignated/ Restricted to Class II
New Ave	State/IDOT	I-355	W 127th St	Short	From Undesignated/ Restricted to Class II
US 52	State/IDOT	Briggs St	Laraway Rd	Undetermined	Undetermined
US 52	State/IDOT	Laraway Rd	Baker Rd	Short	From Undesignated/ Restricted to Class II
US 52	State/IDOT	Cherry Hill	Bruns Rd	Undetermined	Undetermined
US 52	State/IDOT	Bruns Rd	W Offner Rd/Elevator Rd	Short	From Undesignated/ Restricted to Class II
US 52	State/IDOT	W Offner Rd/Elevator Rd	US 45	Short	From Undesignated/ Restricted to Class II
US 52	State/IDOT	IL 7	N Center St/IL 30	Short	From Undesignated/ Restricted to Class II
US 6	State/IDOT	N Cedar Road	Cedar Crossing Drive	Undetermined	Undesignated/Restricted to Undetermined
US 6	State/IDOT	Cedar Crossing Drive	N Collins St	Undetermined	Undesignated/Restricted to Undetermined
IL 7	State/IDOT	I-80 on/off ramps	W Allen St	Short	From Undesignated/ Restricted to Class II
US 52/Jefferson St	State/IDOT	I-55	S Larkin Ave	Short	From Undesignated/ Restricted to Class II
Ramps to the I-55/IL 126 interchange	State/IDOT	I-55	IL-126	Long	New Facility
Caton Farm/ Bruce Rd.	IDOT/WCDOT	US 30	S Cedar Road	Long	New/Improved Facility

Table 2. Changes in Designation for Will County Facilities

Street Name	Jurisdiction	From	To	Term	Change in Designation
Hassert Blvd/ 111th St	Will County	IL 59	Plainfield/Naperville Rd	Short	From Undesignated/ Restricted to Class II
W 135th St	Will County	New Ave	IL 171	Short	From Undesignated/ Restricted to Class II
W Briggs St	Will County	US 52/ Manhattan Rd	I-80	Undetermined	Undetermined
Wilmington-Peotone Rd*	Will County	IL 53	I-57	Long	From Undesignated/ Restricted to Class II

*Design concepts and other planning-level recommendations for corridor is in Appendix C. Priority Project Concepts and Design Considerations Toolkit

Guidance on IDOT Process for Reporting Designated Truck Routes

During stakeholder focus groups with municipalities, it became clear that many agencies do not go through the IDOT process to officially designate a truck route, despite having taken action to define truck routes. As a result, these locally defined truck routes do not define lawful access for trucks per state statute, nor are they reflected on IDOT's GettingAroundIllinois.com website⁷, which is used by commercial routing software. Similarly, many locally defined vehicle restrictions do not follow state statute and as a result are not enforceable.

Providing clear guidance on how to designate official truck routes and restrictions is a critical component of the Truck Routing and Community Plan and Implementation Strategy. Much of the information has already been documented in the Will County Community Friendly Freight Mobility Plan and the O'Hare Subregion Truck Routing and Infrastructure Plan, both of which were published in 2017. The project team reviewed and updated that information for this study.

Highway agencies with jurisdiction over a roadway have the authority to designate it as a Class II truck route. Agencies should follow the Illinois legal framework for a designated truck route to be included in state databases and mapping products. Specifically, roadways identified by local authorities to be designated a Class II truck route must be established via an ordinance or resolution and submitted to IDOT for it to be effective⁸. After adoption by local ordinance or resolution and submission to IDOT, there are no signage requirements in order for a Class II truck route to be effective. If signage is desired, it would be installed and maintained at the responsibility of the agency with ownership over the facility, and would be consistent with the Manual on Uniform Traffic Control Devices.

It is the local agency's responsibility to coordinate the truck route designation with IDOT. To ensure consistency with state law, IDOT staff recommend that proposed Class II truck routes connect to existing Class II truck routes. A network of connected Class II truck routes allows trucks to lawfully travel from origin to destination without having to rely on the "reasonable access" regulations⁹. If a proposed Class II truck route does not connect to an existing Class II truck route, IDOT staff recommends that the local agency first coordinate with the appropriate jurisdiction to ensure that the connecting roadway is classified as a Class II truck route. If the connecting roadway is an IDOT jurisdiction facility, the local agency can make a request to IDOT, either formally or informally, to designate the connecting roadway as a Class II truck route.

The submission process for local agencies in IDOT District 1, which covers Will County, is briefly summarized below:

1. Pass a local ordinance or resolution to establish a Class II truck route. The ordinance or resolution should clearly state the facility to be designated, beginning and ending termini, and the proposed designation as a Class II truck route.

⁷ Designated truck routes and restrictions are available in IDOT's interactive map: <https://www.gettingaroundillinois.com/>

⁸ 625 ILCS 5/15-316(b)

⁹ Public Act 101-0328 allows combination vehicles >65' to travel from Class I & Class II highways onto any non-designated highway for a distance of five highway miles if there is no sign prohibiting that access and the route is not used as a thoroughfare between Class I/II highways. <http://www.ilga.gov/legislation/publicacts/fulltext.asp?Name=101-0328&GA=101>

2. Submit a written request using Form BLR 03210: Resolution Establishing a Class II or Prohibited Truck Route, shown in **Figures 10-11**. This form is available from IDOT's website as a fillable PDF¹⁰. A minimum of **three** certified signed originals of the ordinance or resolution must be submitted in addition to the form. The form and signed originals should be sent to the IDOT District Regional Engineer: IDOT District 1, 201 West Center Court, Schaumburg, IL 60196-1096
- Electronic copies can be submitted via email to: DOT.LocalPolicy@illinois.gov
3. IDOT will review the request and may reach out to the local agency with any clarification questions.
4. Once reviewed, IDOT will publish the designate truck routes on GettingAroundIllinois.com¹¹. The website is an important communication tool for private mapping and routing applications as well as the trucking industry.

Designate Restrictions

Local agencies with jurisdiction over highways may, in addition to designating truck routes, also identify restrictions. The restrictions can be either categorical by prohibiting all trucks or commercial vehicles, or by imposing limitations based on specific parameters on vehicle weight, length and height. Per Illinois law, such restrictions must be identified in an ordinance or resolution and be designated by appropriate signs on the highway¹². A municipality may only designate vehicle restrictions on roadways it has jurisdiction of, and any attempt to do otherwise is invalid.

Recent changes in state legislation create a new reporting mechanism for local agencies to communicate restrictions to IDOT for publication on GettingAroundIllinois.com. The process is the same as communicating designated Class II trucks routes listed previously, with the exception that no IDOT review or approval is required for locally adopted restrictions.

IDOT staff offers some recommendations to local agencies in designating vehicle restrictions. Eight-ton weight restrictions are not recommended since they restrict school buses, garbage trucks and other traffic not associated with commercial trucks. IDOT staff recommends an 18-ton weight restriction to allow school buses to legally access local roads, or a 27-ton weight limit to allow for garbage trucks.

Note: These procedures are expected to change and local communities should check the IDOT website to assure that they are using the most up-to-date forms and instructions.

¹⁰ Illinois Department of Transportation, Resources, Forms, "L", Local Roads, BLR 03210: Resolution Establishing a Class II or Prohibited Truck Route. <http://idot.illinois.gov/Assets/uploads/files/IDOT-Forms/BLR/BLR%2003210.pdf>

¹¹ <https://www.gettingaroundillinois.com/MapView/?config=DTRconfig.json>.

¹² 625 ILCS 5/15-316(c)

Figure 10. Resolution Establishing a Class II or Prohibited Truck Route Page 1



Resolution Establishing a Class II or Prohibited Truck Route

Print Form Print With Instructions Resel Form

Resolution Number

WHEREAS, the State of Illinois by its General Assembly has enacted the Illinois Vehicle Code, and

WHEREAS, 625 ILCS 5/1-126.1 provides that local authorities may designate Class II or Prohibited Truck Route highways within their jurisdiction, and its accordance with 625 ILCS 5/15-111(f), weight limitations shall be designated by appropriate signs placed on such highways; and

WHEREAS, of is desirous of designating truck routes under their jurisdiction as follows:

NOW THEREFORE, BE IT RESOLVED, that the portion of roadways as listed below will be designated as shown.

Route/Street Name(s)	Beginning Termini	Ending Termini	Length	Designation
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Add Row

BE IT FURTHER RESOLVED, that of is desirous of designating truck routes under their jurisdiction as follows:

In accordance with 625 ILCS 5/15-116 which requires local public agencies to provide the Department of Transportation with reference contact names and telephone numbers provides contact information as follows:

Name	Title	Phone Number
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>

BE IT FURTHER RESOLVED, that the Clerk is hereby directed to transmit three (3) certified originals of this resolution to the district office of the Department of Transportation along with a location map indicating the roadways being classified.

I, Clerk in and for said of in the State aforesaid, and keeper of the records and files thereof,

as provided by statute, do hereby certify the foregoing to be a true, perfect and complete original of a resolution adopted by of at a meeting held on

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal this day of -

(SEAL)

Signature Date

Figure 11. Resolution Establishing a Class II or Prohibited Truck Route Page 2

Instructions for BLR 03210

NOTE: Form instructions should not be included when the form is submitted.

This form shall be used when a Local Public Agency (LPA) designates a roadway as a Class II or Prohibited Truck Route. For more information see Chapter 3 of the Bureau of Local Roads and Streets Manual (BLRS Manual). For signature requirements, refer to Chapter 2, Section 3.05(b) of the BLRS Manual. For information concerning current designated truck routes:

For forms completed electronically once a field is completed, fields requiring the same information will be automatically completed.

Resolution Number	The LPA can insert their resolution number assigned to this resolution if applicable.
Local Public Agency Type	Insert the type of LPA. Choose from: City, County, Town, or Village.
Local Public Agency	Insert the name of the LPA.
For each roadway insert the following:	
Route/Street Name(s)	Insert the name of the roadway/street begin designated as a Class II or Prohibited Truck Route
Beginning Termini	Insert the beginning termini of the roadway being designated.
Ending Termini	Insert the ending termini of the roadway being designated.
Class Type	Insert the type of designation, a Class II or Prohibited Truck Route.
Enter additional locations by clicking the "Add" button.	
Local Public Agency Type	Insert the type of LPA type: Choose from City, County, Town, or Village.
Local Public Agency	Insert the name of the LPA.
Name of Transportation notified via letter	Insert the name of the contact. As changes occur, this information shall be updated and the Department
Title	Insert the title of the contact listed to the left.
Phone Number	Insert the phone number for the contact listed to the left.
Name of Clerk	Insert the name of the LPA clerk.
Clerk Type	Insert the type of clerk based on the LPA type. Types to choose from are: County, City, Town, or Village.
Governing Body Type	Insert the type of administrative body. Choose Board for County, Council for a City or Town, choose President and Board of Trustees for a Village.
Name of LPA	Insert the name of the LPA.
Date	Insert the date of the meeting
Day	Insert the day the Clerk is signing the document.
Month/Year	Insert the month and year of the clerk's signature.
Seal	The Clerk shall seal the document here.
Clerk	Clerk shall sign here.

A minimum of three (3) certified signed originals must be submitted to the Regional Engineer's District Office. Following the Regional Engineer's approval, distribution will be as follows:

- Local Public Agency Clerk
- Engineer (Municipal, Consultant or County)
- District

Upon processing of the form by the District, the District is also responsible to email a PDF of the form to the following:

- Bureau of Operations
- Bureau of Local Roads, Central Office
- Roadway Inventory, Central Office

Investment Plan to Support Truck Routes

An investment plan will guide transportation agencies on how to strategically improve the highway system to facilitate truck travel, while also addressing safety and congestion concerns that affect all roadway users. These projects will improve travel for trucks on the existing network of truck routes, as well as new truck routes anticipated for designation both in the short- and long-term.

This section identifies key truck-routing corridors for improvement in both the short- and long-term, as well as the status of current plans or upcoming improvements to those corridors. It closes with a review of potential funding opportunities that transportation agencies in the study area could pursue as they implement recommendations from Moving Will County.

Appendix B provides a comprehensive set of projects to address asset condition and modernization needs in the study area. Appendix B draws from a variety of sources, including prior planning and programming efforts – such as the ON TO 2050 comprehensive regional plan for northeastern Illinois – as well as new project concepts identified over the course of the Moving Will County effort. The latter are drawn from the Existing Conditions Report, completed in March 2020, as well as stakeholder feedback, public comment, and the study team.

Short-Term Priority Corridor Improvements

The following priority corridors have been identified for freight mobility improvements and community mitigation measures to advance the implementation of the Moving Will County effort. These projects are under construction or are expected to be underway in the next three to five years.

- **I-55 at IL 59 Access Project (existing Class I truck route – I-55; existing Class II truck route – IL 59)**

This corridor includes interchange expansions and road extensions to improve access in the City of Joliet and the Village of Shorewood. The project includes a diverging diamond interchange at Illinois Route 59. The corridor also includes the extension of Olympic Boulevard from the Rock Run industrial park to I-55.

Status and plan support: This corridor has been amended into ON TO 2050 as a regionally significant project. The I-55 interchange at Illinois Route 59 is fully programmed in the FY 2021-2025 TIP.

Funding networks: I-55 is identified as part of the Primary Highway Freight System of the National Highway Freight Network. The segment is also part of the National Highway System.

Next step: Complete engineering and right-of-way acquisition.

Project website: <http://www.i55atil59accessproject.org/>

- **I-80 from Ridge Road to US 30 (existing Class I truck route – I-80; existing Class II truck route – US 30)**

This corridor includes interchange improvements, bridge replacements, capacity additions, and pavement reconstruction. Moving Will County supports additional through lanes on I-80,

reflecting truck mobility needs in the corridor. The corridor will improve pavement and bridge conditions as well as crash concerns. Sensitive land uses include Black and low-income communities within the corridor.

Status and plan support: This corridor is identified as part of ON TO 2050 and has received substantial funding as part of the *Rebuild Illinois* capital plan. The project was also a top-tier project in the Will County Community Friendly Freight Mobility Plan. There are also ongoing preservation projects for existing pavement and bridges, which date from the 1960s.

Funding networks: This corridor is part of the Primary Highway Freight System of the National Highway Freight Network. This segment is also part of the National Highway System.

Next step: Complete Phase I engineering and begin Phase II engineering.

Project website: Project website: <https://i-80will.com/>.

- **IL 53 Improvements from US 52 to West Arsenal Road/Manhattan Road (existing Class II truck route – IL 53)**

This corridor includes intersection improvements, channelization, and access improvements on Illinois Route 53. Sensitive land uses include a low-income Black community, Preston Heights, on the north end of the corridor and the Midewin National Tallgrass Prairie on the south end. This part of Illinois Route 53 was part of the original, and later Alternate, US Route 66, and is for this reason listed on the National Park Service’s National Register of Historic Places.¹³

Status and plan support: Phase-1 engineering is underway for this project. . Phase-2 engineering and construction are programmed in CMAP’s FY 2021 – 2025 TIP. The intersection of Laraway Road and Illinois Route 53 is a critical element of this corridor, and is identified as a top-tier project in the Will County Community Friendly Freight Mobility Plan.

Funding networks: This corridor is included in the National Highway System. The remainder of the corridor should be added to the National Highway Freight Network as a Critical Urban Freight Corridor at the appropriate time to support a funding proposal.

Project website: <http://il53corridor.org/>

- **143rd Street Plainfield and Romeoville I-55 Access (proposed Class II truck route)**

This corridor will provide alternate routes for trucks traveling between Illinois Route 59 or US 30 and the existing I-55 interchange at Illinois Route 126 and the programmed I-55 interchange at Lockport Street/Airport Road. These improvements will reduce congested truck travel and will reduce negative truck impacts on residents and activities near downtown Plainfield. The improvements consist of an extension of 143rd Street from Illinois

¹³ National Park Service. “Data Downloads” The register is available for download at <https://www.nps.gov/subjects/nationalregister/data-downloads.htm>. The documentation for the Alternate US 66 site is at <https://catalog.archives.gov/id/28891486>.

Route 59 to Illinois Route 126, a further extension of 143rd Street to I-55 at Lockport Street/Airport Road, an expanded full-access interchange for Illinois Route 126 at I-55, and a new full access interchange for Lockport Street/Airport Road at I-55. In total, the corridor will have greater accessibility, less truck congestion, and reduced impacts at key sites. Sensitive environmental resources exist throughout the corridor.

Status and plan support: The corridor is composed of several components with staged implementation. First, 143rd Street from Illinois Route 59 to Illinois Route 126 is fully funded and programmed for construction beginning in FY 2022. Engineering and right-of-way acquisition are also programmed for the interchange improvements in FY 2022. The interchange improvements are included in ON TO 2050.

Funding networks: The 143rd Street extension is identified as a Critical Urban Freight Corridor.

Potential next step: Identify additional funds for unfunded construction elements.

Project website: Information about the project is at <https://www.plainfield-il.org/pages/publicimprovements> (IL 59 to IL 126) and at <http://www.airportand126study.org/index.html> (I-55 interchanges).

- **Houbolt Road from I-80 to Schweitzer Rd (existing Class I truck route – I-80; proposed Class II truck route – Houbolt Road)**

This corridor includes a reconstructed interchange for I-80 at Houbolt Road, capacity improvements along existing Houbolt Road between I-80 and US 6, and a new tolled bridge across the Des Plaines River to connect Houbolt Road to the CenterPoint Intermodal Center near the intersection of Vetter Road and Schweitzer Road. The new bridge will reduce a substantial amount of out-of-direction travel between the Intermodal Center and points north and west along I-80 and I-55. The bridge will provide important new connectivity in western Will County for the freight industry.

Status and plan support: Construction is expected to begin in summer 2021. The corridor is a top-tier project in the Will County Community Friendly Freight Mobility Plan.

Funding networks: The new bridge over the Des Plaines River will be tolled. The remainder of the corridor could be added to the National Highway Freight Network as a Critical Urban Freight Corridor at the appropriate time to support a funding proposal.

Potential next step: The project is expected to begin construction in summer 2021.

Project website: <https://www.houboltroadextension.com/>

Long-Term Priority Corridor Improvements

The following priority corridors have also been identified for freight mobility improvements and community mitigation measures in the long term. These corridors typically require more study and not expected to be under construction in the next few years.

- **I-55 from I-80 to Coal City Road (existing Class I truck route)**

This corridor includes interchange improvements, bridge replacements, capacity additions, and pavement reconstruction. Moving Will County supports additional through lanes on I-55, reflecting truck mobility needs in the corridor. This project includes the replacement of the Smith Bridge over the Des Plaines River. Most pavement and many bridges on this corridor, including the Smith Bridge, date from the 1950s. The corridor also includes interchange improvements at Lorenzo Road. Sensitive environmental resources exist throughout the corridor.

Status and plan support: This corridor is identified as part of ON TO 2050 but. There are funds for Lorenzo Road and Illinois Route 129 in the IDOT Fiscal Years 2022-2027 Multi-Year Improvement Plan (MYP).

Funding networks: This corridor is part of the Primary Highway Freight System of the National Highway Freight Network. This segment is also part of the National Highway System.

Potential next step: Initiate project studies for larger corridor improvements.

Project website: Lorenzo Road interchange project:

<http://www.idot.illinois.gov/projects/i55-at-lorenzo-rd>.

- **US Route 6 from I-55 to I-80 (existing Class II truck route)**

This corridor includes additional capacity, railroad crossing improvements, and pavement reconstruction. The Houbolt Road bridge will connect to US Route 6 at the bridge's northern terminus and may bring additional truck traffic to the US 6 corridor. Land is also being developed for freight-related uses within the US Route 6 corridor itself. Additionally, sensitive land uses include the adjacent Rock Run Rookery. The new Lion Electric Auto Manufacturing Plant that will manufacture heavy duty urban electric vehicles will be located near US Route 6 and I-55. The added traffic from this plant will accelerate the need to begin engineering. Design concepts and other planning-level recommendations for this corridor are in **Appendix C**. Priority Project Concepts and Design Considerations Toolkit.

Status and plan support: Improvements have recently been completed in the vicinity of the I-55 interchange. Additional improvements are programmed in the vicinity of the Houbolt Road intersection as part of the bridge project. IDOT studied the corridor and gave design approval in March 2001, but studies would need to be renewed because of changed conditions over the past twenty years. The corridor is a top-tier project in the Will County Community Friendly Freight Mobility Plan and is also included in the Will County Long Range Transportation Plan.

Funding networks: This corridor is part of the National Highway System. The corridor could be added to the National Highway Freight Network as a Critical Urban Freight Corridor at the appropriate time to support a funding proposal.

Potential next step: Renew project studies. Develop planning-level cost estimate.

- **US Route 52 Manhattan Bypass (conceptual alignment for long-term Class II truck route)**

This corridor consists of a proposed new bypass of US 52 to the west and south of the Village of Manhattan along new or existing right-of-way. This bypass is intended to address community conflicts related to truck travel along the existing alignment of US 52 within the Village of Manhattan, where a number of sensitive uses, including schools, parks, and a historic downtown, are adjacent to US 52. In addition, the current winding, constrained right-of-way of US Route 52 within the Village make it less than ideal for a truck route. For a bypass of Manhattan, land-use factors to consider include tank farms and pipeline heads for BP, Enbridge, and others along Bruns Road; protecting the Midewin National Tallgrass Prairie along Hoff Road; and protecting agricultural uses.

Status and plan support: A feasibility study has been initiated for this corridor. The project has not been previously identified in ON TO 2050, the Will County Community Friendly Freight Mobility Plan, or the Will County Long Range Transportation Plan.

Funding networks: The corridor could be added to the National Highway Freight Network as a Critical Urban Freight Corridor at the appropriate time to support a funding proposal.

Potential next step: Complete feasibility studies.

- **Various railroad bridge clearances (various existing Class II truck routes)**

Several railroad bridges in need of improvement cross existing Class II truck routes in Will County. Locations include the following:

- CN Railroad bridge over Illinois Route 53/Broadway Street in Crest Hill (lane widths < 10' per lane, vertical clearances 13'7");
- Union Pacific Railroad and BNSF Railway bridges over Illinois Route 53/US 52/Chicago Street south of I-80 in unincorporated Joliet Township (lane widths restricted to approximately 10' per lane). Note: There is a technical analysis on U.S. Route 52 Railroad Grade Separation Feasibility (I-80 to Doris Avenue) in **Appendix C. Priority Project Concepts and Design Considerations Toolkit**;
- Canadian National Railway and BNSF Railway bridge over eastbound US 30/US 6/Jefferson Street in downtown Joliet. The vertical clearance for this Class II truck route is marked at 13'5", below the 13'6 height permitted for trucks in Illinois; lane widths are 12' (a 2019 construction project may have changed the elevation of the north lane of this two-lane roadway).
- Canadian National Railway and BNSF Railway bridge over westbound US 30/US 6/Cass Street in downtown Joliet. The vertical clearance for this Class II truck route is marked at 13'3", below the 13'6 height permitted for trucks in Illinois.
- BNSF Railway bridges over northbound Illinois Route 53 (Scott Street and Columbia Street) in downtown Joliet. The vertical clearances are market at 13'6". Trucks could

alternatively be accommodated by rerouting northbound Illinois Route 53 via Ohio Street and North Chicago Street, away from the railroad bridges.

These bridges have lateral and vertical clearances that are inconsistent with modern truck routes, so replacement should be considered. Pavement condition at several of these locations is in fair condition or worse.

Status and plan support: The Illinois Route 53 project in Crest Hill is identified in the FY 2021-2025 TIP, but remains unfunded. The remainder of these projects are neither in adopted plans nor in fiscally-constrained programs.

Funding networks: These locations are on the National Highway System. The associated corridors could be added to the National Highway Freight Network as a Critical Urban Freight Corridor at the appropriate time to support funding proposals.

Potential next step: Renew or initiate project studies, as appropriate. Develop planning-level cost estimates. Apply for a Planning and Environmental Linkages (PEL) study with the information in the technical analysis on U.S. Route 52 Railroad Grade Separation Feasibility (I-80 to Doris Avenue) in **Appendix C**. Priority Project Concepts and Design Considerations Toolkit.

- **Caton Farm-Bruce Road Corridor (conceptual alignment for long-term Class II truck route)**

This proposed long-term truck route will extend generally from U.S. Route 30 along Caton Farm Road, across the Des Plaines River Valley on a new bridge, along Bruce Road to Gougar Road, and then along Gougar Road to Illinois Route 7. The corridor will provide an alternative for trucks to cross the valley without going through downtown Lockport, avoiding a truck bottleneck through dense residential and neighborhood commercial areas, schools, and parks. Sensitive land uses in the corridor include the Des Plaines River Valley, forest preserves, and residential areas.

Status and plan support: A Phase I engineering study is underway in the corridor. A preferred alternative is expected to be determined in 2021. The corridor is identified as an unconstrained project in the Will County Long Range Transportation Plan.

Funding networks: The corridor could be added to the National Highway Freight Network as a Critical Urban Freight Corridor at the appropriate time to support a funding proposal.

Potential next step: Complete project studies. Include the project as a Regionally Significant Project in ON TO 2050 as additional study is completed.

Project website: <http://cfb-study.com/>

- **Gougar Road Corridor (existing Class II truck route)**

This corridor will provide access from a rapidly developing industrial area along Laraway Road to US 30 and thence to I-80. Improvements being studied in the corridor include additional capacity, a reconstructed bridge over I-80, and a railroad grade separation at the

CN railroad. Sensitive land uses along the corridor include Lincoln Way West High School at Spencer Road and Providence Catholic High School at US 30.

Status and plan support: Two Phase I engineering studies are underway in the corridor, including general corridor improvements and the highway-rail grade separation. The corridor is a top-tier project in the Will County Community Friendly Freight Mobility Plan.

Funding networks: The corridor could be added to the National Highway Freight Network as a Critical Urban Freight Corridor at the appropriate time to support a funding proposal.

Potential next step: Complete project studies. Identify further design and construction funding.

Project website: For general corridor improvements: <https://gougarroadstudy.com/>

- **Laraway Road Corridor (existing and proposed Class II truck route)**

This corridor serves a rapidly developing industrial area. Improvements being studied along the corridor include a highway-rail grade separation at the Union Pacific Railroad and intersection improvements at Illinois Route 53. Other improvements include capacity additions along the corridor and additional intersection improvements.

Status and plan support: A Planning and Environmental Linkages (PEL) study to identify a project purpose and need and to identify alternatives to be carried forward, including the potential grade separation, is underway from Brandon Road to Illinois Route 53. The intersection of Illinois Route 53 and Laraway Road is identified as a top-tier project in the Will County Community Friendly Freight Mobility Plan. Additional lanes for Laraway Road east of US Route 52 are identified as a constrained project in the Will County Long Range Transportation Plan and as a regionally significant project in ON TO 2050. As of June 2021, a Phase I Engineering Study is complete between US Route 52 and Cedar Road, with various segments under design and construction. The segment between Cedar Road and US Route 45 is nearing design approval.

Funding networks: West of Illinois Route 53, the corridor is recommended for addition to the National Highway System as a Truck-Rail Intermodal Freight Connector, and thus to the Primary Highway Freight System of the National Highway Freight Network. East of Illinois Route 53, the corridor could be added to the National Highway Freight Network as a Critical Urban Freight Corridor at the appropriate time to support a funding proposal.

Potential next step: Complete project studies. Identify further design and construction funding.

- **Wilmington-Peotone Road (long-term Class II truck route)**

This corridor will provide unique east-west truck access across the southern tier of Will County. Potential improvements include reconstructed pavement with additional lanes, intersection improvements, and signalization. The improvements will extend from Illinois Route 53 to Illinois Route 50, just east of I-57. A design concept and other planning-level

recommendations for this corridor is located in in **Appendix C. Priority Project Concepts and Design Considerations Toolkit.**

Status and plan support: The corridor is identified as a regionally significant project in ON TO 2050. No studies have been initiated for the project.

Funding networks: Wilmington-Peotone Road is included as part of the National Highway System. The corridor is also included in the National Highway Freight Network as a Critical Urban Freight Corridor (inside the Chicago Urbanized Area) and as a Critical Rural Freight Corridor (outside the Chicago Urbanized Area).

Potential next step: Initiate project studies. A logical next step would be to initiate a Planning and Environmental Linkages Study using statewide or metropolitan planning funds. There are additional environmental considerations for this corridor as identified by Openlands in **Appendix F: Stakeholder Comments.** These considerations should be revisited in future phases of the project, including a future engineering feasibility/impact study.

Overview of Funding Opportunities

As summarized in **Table 3**, several funding opportunities are available to meet the asset condition and modernization needs identified above. Program eligibilities vary, both in terms of the improvements to be made and the type of roadway to be improved. Generally, programs that rely on federal highway funding – such as the National Highway Performance Program, Illinois Competitive Freight Program, Surface Transportation Program, or Congestion Mitigation and Air Quality Improvement Program – requires at least a 20 percent local match. Programs that rely on state funding may have larger matching fund requirements. Matching funds provided by local agencies may include Motor Fuel Tax or Tax Increment Financing (TIF), or a combination of competitive state and local funds (e.g., IDOT Economic Development Program funds, which are state, matching Surface Transportation Program funds, which are federal). The list of programs in Table 6 is not exhaustive, but covers the main programs commonly used by local public agencies.

Additional resources and guidance on navigating various funding programs are available from CMAP and the Will County Governmental League.

Table 3. Summary Matrix of Funding Opportunities

Program	Eligibility	Programming Agency	Notes
National Highway Performance Program (NHPP)	National Highway System (NHS) facilities ¹⁴	IDOT	Supports broad array of improvements, from asset condition to expansion, and phases of project development. Directly programmed by IDOT as part of the annual Multi-Year Plan each spring ¹⁵ .

¹⁴ More on the National Highway System, from CMAP: <https://www.cmap.illinois.gov/mobility/roads/cmp/nhs>.

¹⁵ <https://idot.illinois.gov/transportation-system/transportation-management/transportation-improvement-programs-/multi-modal-transportation-improvement-program/index>

Program	Eligibility	Programming Agency	Notes
Highway Safety Improvement Program (HSIP)	Local-jurisdiction facilities.	IDOT	A Local HSIP is competitively programmed by IDOT annually, with applications in the spring ¹⁶ . Requires 10 percent local match. Broad eligibility for project phases and scope of improvement, subject to benefit-cost criteria defined in application.
Illinois Competitive Freight Program	National Highway Freight Network (includes Primary Highway Freight System, Interstates, and Critical Urban/Rural Freight Connectors)	IDOT	Competitively programmed, with application-specific criteria and scoring process. Last call for projects was in 2018 for a five-year program ¹⁷ .
Economic Development Program (EDP)	Local-jurisdiction roadways. Requires private-firm sponsor to make a job retention/expansion commitment.	IDOT	IDOT accepts applications on a rolling basis and requires preliminary engineering cost estimates to be complete ¹⁸ . Project costs are shared 50/50 between local agency and IDOT, and IDOT award amount is maximum of \$2 million.
Infrastructure For Rebuilding America Grant Program (INFRA)	National Highway Freight Network; National Highway System; railway-highway grade crossing or separation; intermodal; rail; or surface transportation projects within rail, water, or intermodal facilities that provide a necessary connection to an intermodal.	USDOT	USDOT has an annual call for projects, awarding a minimum of \$5 million (for small projects). Scoring criteria focuses on projects that include innovative technologies, safety benefits, address climate change and environmental justice, modal shifts, reduction in VMT, and racial equity—including outreach to and designed to benefit under-served communities.
Rebuilding American Infrastructure with Sustainability and Equity Grant Program (RAISE)	State, local and regional capital or planning projects.	USDOT	Formerly known as BUILD and TIGER, there is an annual call for projects. The maximum award is \$25 million. Scoring criteria include: safety, environmental sustainability, quality of life, economic competitiveness, state of good repair, innovation, and partnership. The target is multimodal and multi-jurisdictional projects.
Consolidated Rail Infrastructure and Safety Improvements Program (CRISI)	Broad	Federal Railroad Administration (FRA)	FRA accepts applications for an annual call for projects that improve safety, efficiency and reliability for passenger and freight railroads, including public-private partnerships.
Truck Access Route Program (TARP)	Local-jurisdiction roadways.	IDOT	IDOT accepts applications for an annual call for projects. IDOT funds \$45,000 per lane mile and \$22,000 per intersection, up to the lessor of \$900,000 total or 50 percent of construction costs ¹⁹ .
Grade Crossing Protection Fund	Local-jurisdiction highways crossing railroads	Illinois Commerce	ICC accepts applications for its annual five-year Crossing Safety Improvement Program ²⁰ . Supports range of

¹⁶ <https://idot.illinois.gov/transportation-system/local-transportation-partners/county-engineers-and-local-public-agencies/funding-opportunities/highway-safety-improvement-program>

¹⁷ <https://idot.illinois.gov/transportation-system/transportation-management/planning/illinois-competitive-freight-program>

¹⁸ <https://idot.illinois.gov/transportation-system/local-transportation-partners/county-engineers-and-local-public-agencies/funding-opportunities/economic-development-program>

¹⁹ <https://idot.illinois.gov/transportation-system/local-transportation-partners/county-engineers-and-local-public-agencies/funding-opportunities/truck-access-route-program>

²⁰ <https://www.icc.illinois.gov/rail-safety>

Program	Eligibility	Programming Agency	Notes
		Commission (ICC)	improvement types, from signal equipment to grade separation. Requires 10 percent match.
Congestion Mitigation and Air Quality Improvement (CMAQ) Program	Broad	CMAQ	Joint biannual call for projects (odd years) with STP Shared Fund program with application-specific criteria and scoring process ²¹ . Generally requires Phase I engineering to be complete. Supports targeted set of improvements, including intersection improvements and direct emissions reduction projects. May fund private improvements (e.g., railroad) with public-sectors sponsor.
Surface Transportation Program (STP) – Shared Fund	Local or state jurisdiction roadway with functional classification above local roadway ²² .	CMAQ	Joint biannual call for projects (odd years) with CMAQ program with application-specific criteria and scoring process ²³ . Generally requires Phase I engineering to be complete. Supports broad array of improvements and generally larger (i.e., greater than \$5 million in cost) projects.
STP – Local Funds	Local or state jurisdiction roadway with functional classification above local roadway ²⁴ .	Will County Governmental League	Biannual call for projects (even years). Evaluation criteria and eligibility maintained by the Will County Governmental League, subject to CMAQ requirements.
Motor Fuel Tax (MFT)	All public roadways	Local	A portion of state MFT is shared with counties and municipalities subject to state statute. Counties and home rule municipalities may establish local-option MFTs.
Tax Increment Financing (TIF)	Supports infrastructure improvements within TIF district	Local	Municipalities have authority to establish and managed TIF districts, subject to criteria in state statute

Truck-Related Public Policy Issues

Two public policy issues facing the trucking industry, both nationwide and in the Chicago region, also impact the safe and efficient movement of freight in Will County. The first is the availability of an adequate supply of safe, designated truck parking spaces. The second is the need to coordinate truck permits, which are required for oversized and overweight (OSOW) trucks, across various permitting agencies. These are included in the Truck Routing and Community Plan and Implementation Strategy for context, and as examples for additional regional coordination to improve safe and efficient movement of freight throughout the study area.

Overview of Truck Parking Concerns and Opportunities

Across the industry, there is a lack of dedicated truck parking spaces, either at public safety rest areas (e.g., along the Interstate system), or at private truck stops. This is a concern in general, as truck drivers require safe and secure locations for rest or to stage for a delivery window. But recent changes in federal hours-of-service (HOS) regulations have exacerbated these concerns. In general,

²¹ <https://www.cmap.illinois.gov/mobility/strategic-investment/cmaq>
²² More on functional classification available from CMAP: <https://www.cmap.illinois.gov/mobility/roads/roadway-functional-classification>
²³ <https://www.cmap.illinois.gov/committees/advisory/council-of-mayors/stp>
²⁴ More on functional classification available from CMAP: <https://www.cmap.illinois.gov/mobility/roads/roadway-functional-classification>

truck drivers are required by federal law to take 10 hours of rest after 11 hours on duty.²⁵ As a result, a truck driver nearing the end of his or her HOS for the day must weigh traveling further in the hope of finding an available parking space before the HOS expire or park in an informal, undesignated parking space. The latter may include crash investigation sites, ramps along expressway entrances or exits, side streets in nearby neighborhoods, or unused parking lots at retail centers or other locations. These informal locations can be unsafe, both for the traveling public and the truck driver, and also expose the truck to a security risk for theft. The lack of amenities, such as lighting, restrooms, food, or fuel, is also a concern.

According to the Jason's Law Survey²⁶, published by FHWA in 2015, Illinois ranks eighth among the states for the total number of truck parking spaces, with a total of 1,622 public parking spaces at safety rest areas and 9,640 private truck parking spaces at truck stops. A 2019 update²⁷ of the Jason's Law Survey indicated an additional 48 public truck parking spaces and an additional 2,189 private truck parking spaces were added.

As of 2019, there are two safety rest areas (Northbound and Southbound at Prairie View along I-57) located within Will County and another two safety rest areas located in neighboring Grundy County (Eastbound and Westbound at Three Rivers along I-80). Prairie View Safety Rest Areas (NB/SB) has a total of 39 truck parking spaces and the Three Rivers Safety Rest Areas (EB/WB) has a total of 70 truck parking spaces. In addition, truck parking is available using the Illinois Tollway's oases in neighboring Cook County at the Hinsdale Oasis along I-294 in western Cook County and at the Tollway's Chicago Southland Lincoln Oasis along I-294 in southern Cook County. In addition, according to Jason's Law data, there were 12 private truck stops in Will County. Private truck stops tend to be located adjacent to Interstate corridors, primarily I-80 and I-55.

IDOT is currently developing a Statewide Truck Parking Plan. The scope of this study is to review the current demand for truck parking at safety rest areas; identify key corridors of the state's expressway system based on truck volumes, fatigue-related truck crashes, and excessive space of rest areas; and then propose locations for additional truck parking, both at safety rest areas and new locations. That study is expected to conclude in 2021.

Overview of OSOW Concerns and Opportunities

Although a relatively small share of overall truck trips, oversized and overweight (OSOW) truck trips are necessary to support key economic sectors, including agriculture, energy, and construction. Because these trips require the movement of items that exceed height and length standards and/or are heavier than typically allowed (e.g., 80,000-pound weight limit), they require review and approval via permit before the trip can be made. Various agencies, ranging from IDOT to the County to municipalities and townships, may have jurisdiction over roadways required for a single trip, and permits required from each agency. In turn, each agency may have a different permitting process, ranging from an automated online process to a manual, in-person process. The

²⁵ <https://www.fmcsa.dot.gov/regulations/hours-service/summary-hours-service-regulations>

²⁶ https://ops.fhwa.dot.gov/freight/infrastructure/truck_parking/jasons_law/truckparkingsurvey/index.htm

²⁷ https://ops.fhwa.dot.gov/freight/infrastructure/truck_parking/jasons_law/truckparkingsurvey/ch1.htm

difficulty in coordinating OSOW permits across jurisdictions has been identified by the trucking industry in Illinois as a key challenge to efficiently conducting business.

CMAP led the Regional Truck Permitting Plan (2016) to investigate these issues in greater detail²⁸. The plan inventoried current practices among the seven counties of northeast Illinois, including Will County, along with the City of Chicago and IDOT. The plan's final report outlined a vision to better coordinate practices across agencies, including universal requirements that should apply to all agencies and then a tiered approach to progressively apply more advanced features to higher-volume agencies.

Since completion of that plan, many local agencies in northeastern Illinois have opted to partner with a third-party vendor to complete OSOW permits. The vendor manages the application process at no cost to the public agency, uses an online system for efficient service to industry, and may have multiple public agencies among its customers, allowing coordination of permit applications across multiple jurisdictions automatically. Will County began to use a third-party vendor, Oxcart, in February 2018 to manage its OSOW permitting process²⁹. Many local agencies in Will County also contract with Oxcart, including the Village of Channahon (since August 2017)³⁰, City of Joliet (since February 2016)³¹, Village of Manhattan (since March 2016)³², Village of Plainfield (since January 2015)³³, and the Village of Romeoville (since September 2017)³⁴. Additionally, Oxcart interfaces with the IDOT permitting system.

Mitigation Strategies and Livability Recommendations

The Moving Will County study recognizes that proactive planning is needed to mitigate the impact of freight traffic on local communities. While the adoption of designated truck routes and implementation of capital improvements on the highway network are key steps toward meeting that goal, the Moving Will County study includes recommendations for additional design and land use strategies that will benefit communities.

By reviewing a variety of national, regional, and local reports, several truck-management approaches and strategies were identified over the course of the Moving Will County study. The review found that mitigation strategies share many commonalities and tend to fall into three broad categories: integrated transportation and land use planning, coordination between public and private sectors, and the role of technological advancement.

Integrated Transportation and Land Use Planning

Coordinated transportation and land use planning can ensure that freight-generating land uses are well served by the highway network, as well as direct freight movements away from sensitive areas and toward highways best equipped to handle truck traffic. Successful planning promotes economic

²⁸ <https://www.cmap.illinois.gov/documents/10180/487159/CMAP+Regional+Truck+Permitting+Study+-+Final+Report.pdf/a6cb4ff5-9040-476c-94d8-9c0dec89bdcd>

²⁹ <https://www.willcountyillinois.com/County-Offices/Economic-Development/Division-of-Transportation/Permit-and-Access-Regulations/Oversize-and-Overweight-Vehicles-Details>

³⁰ https://illinoistruckcops.org/?page_id=7990

³¹ https://illinoistruckcops.org/?page_id=7226

³² https://illinoistruckcops.org/?page_id=7244

³³ https://illinoistruckcops.org/?page_id=6402

³⁴ https://illinoistruckcops.org/?page_id=8016

growth while at the same time preserving quality of life for local communities. National best practices include those related to local planning and zoning decision-making, as well as transportation facility design.

Local Planning and Zoning Decision-Making

At a larger scale, local governments can promote integrated transportation and land use planning by zoning for industrial land uses in areas well served by existing freight transportation assets, including Interstate highways, major arterials, and rail and waterway connections. The Village of Lockport, for example, has permitted new warehousing and distribution developments near I-355, away from the historic downtown and residential areas.

At the site scale, lot depth and setback requirements can create buffer zones between freight-intensive land uses and their neighbors. These approaches could be reviewed and adopted by municipalities in the study area. Further, a coordinated system of truck routes and truck restrictions can direct traffic away from sensitive land uses and toward facilities more appropriate to support freight movement.

In relation to site plan design, Will County can encourage that developments situate entrance and exit points so that truck traffic will not be tempted to “short-cut” through residential areas or other non-compatible uses. Additionally, checking that adequate space is available within a development site can help to ensure that maximum queue lengths can be accommodated in order to reduce the risk of trucks stacking on the surrounding street network. Encouraging or requiring future developments to design for off-street truck loading that does not require backing up on streets and into loading spaces (e.g., circulation area around development) can help mitigate the constraints previously listed.



Example from Elmhurst, IL of industrial development that has off-street truck loading and doesn't require backing up on-street to access. Image credit: Google Maps, 2020.

Implementing landscape architecture strategies to help mitigate sound impacts from freight is another opportunity to integrate transportation and land use planning. FHWA provides supporting information on the importance of ensuring that freight recommendations are noise compatible with surrounding land uses³⁵. If offset from the street and salt impacts are not a concern, shrubs and

³⁵ https://ops.fhwa.dot.gov/publications/fhwahop12006/sec_2.htm

trees can be used to block truck disturbances. Conifers can provide sight screen and psychological noise blocking effects. This strategy is more effective for blocking sound from neighborhoods than sidewalks. Safety and security can become an issue if walking routes feel secluded or views are blocked, especially at night. More landscape architecture design guidance for freight areas will be provided in the Land Use Strategy document.

Additional Topics for Future Study Relating to Historical Residential Patterns near Freight

This plan and its recommendations are a first step toward future planning studies and implementation. For many of the recommendations listed in this report, further study and evaluation will be required. As such, communities and local agencies can then use the recommendations as a resource and tool in preparing more detailed, site specific plans.

It is important to acknowledge and address the historical role the impact of freight has had on marginalized communities, such as black, brown, and low-income populations. Such communities often live near freight facilities and truck routes, and therefore experience the resulting negative impacts, such as poor air quality, increased noise, safety issues, traffic congestion, and economic disinvestment.

To address these disparities, site-specific studies focused on reducing risk for marginalized communities should be undertaken to examine and recommend appropriate mitigation strategies, such as:

- Conduct a Health Impact Assessment (HIA)
- Reduce air and noise pollution (and vibration)
- Reduce truck related disturbances
- Improve visual and aesthetic conditions
- Increase community safety
- Address road issues (congestion, traffic flow, pavement conditions, cut-through traffic)
- Implement livability recommendations
- Improve local economic conditions
- Optimize and coordinate appropriate land uses

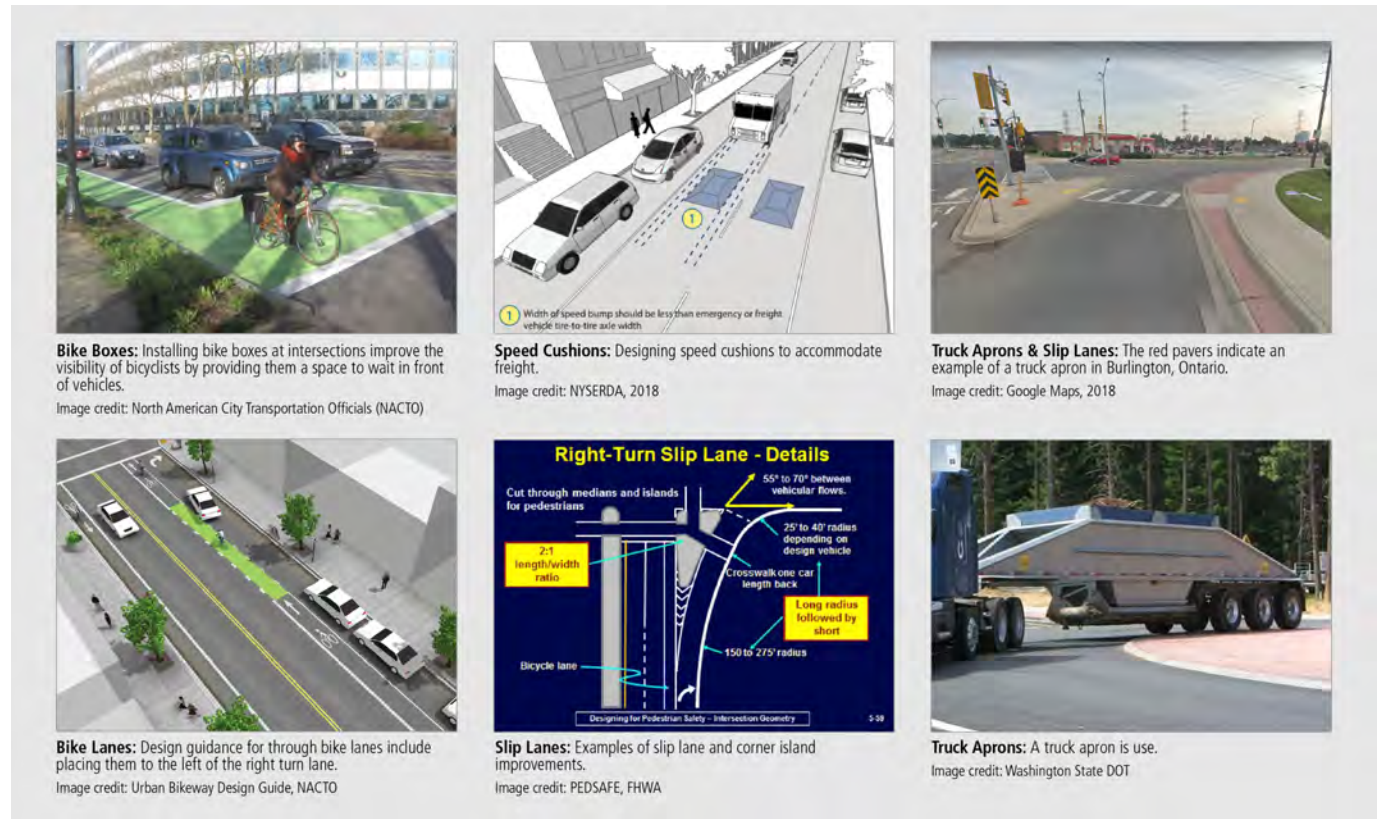
Street Design

Numerous street design considerations could be applied to mitigate the impact of high volumes of truck traffic, particularly in sensitive areas. For example, IDOT-jurisdiction routes, some of them Class II truck routes, serve as main streets in downtown Joliet, Lockport, and Manhattan. The truck traffic carried by these facilities conflicts with pedestrians and bicyclists, and large trucks have difficulty navigating tight turning radii, parked vehicles on-street, and even placemaking treatments within relatively constrained rights-of-way.

Various transportation design strategies can better accommodate large trucks with other road users in mind. Strategies such as recessed stop lines and crosswalks, which provide large vehicles with space for lane encroachment into an adjacent lane, could be a cost-effective way to improve the ability to make tight turns without the need to widen streets in the historic downtowns in the study area. Mountable curbs are another design consideration suitable for some of the denser areas of the county but must be weighed against the potential risk to pedestrians. Other design considerations for freight vehicles include painted curb extensions, truck aprons, redesigned right

turn corner islands, speed cushions, painted bike boxes and slip lanes, the use of two- or three-center turning radii, and innovative approaches to traffic signal phasing, see **Figure 12** for some images depicting some of these strategies. More details on these design ideas are located in **Appendix E. National Best Practices for Accommodating Trucks.**

Figure 12. Examples of Transportation Design Strategies for Large Truck Accommodation



Coordination between Public and Private Sectors

The importance of coordination and communication between the public and private sectors is commonly emphasized across the national best practices. When the public sector sets definitive and clear requirements for operation, the private sector is aware of local priorities and can plan accordingly. For example, many local governments are increasingly requiring the use of side guards and convex mirrors on large trucks for all contractors that do business with them. This low-cost safety equipment prevents pedestrians, bicyclists, and cars from going under a truck's trailer in the event of a collision, substantially improving safety outcomes. As described in the literature review, several large public-sector agencies have taken long, incremental strategies to best deal with these challenges. By progressively enforcing restrictions over a longer time span, the private sector is given a chance to adapt while still ensuring their continued improvement over time. The County could also coordinate with corporations to identify available areas where cell phone waiting lots can be sited to stage trucks that are waiting to receive loads.

The national literature noted the importance of freight advisory committees to serve as a venue for public and private sector stakeholders to discuss common issues and coordinate activities. While private-sector groups like the Will County Center for Economic Development and public-sector groups like the Will County Governmental League coordinate actions and play a critical role in discussing freight issues and coordinating transportation improvements, no ongoing public-private freight advisory committee currently exists in Will County. The previous Will County Community Friendly Freight Mobility Plan (2017) used a diverse Freight Advisory Committee to inform the plan development, offering a template for a group that could be reconstituted or built upon as an ongoing forum to discuss freight issues in the study area.

In the Will County context, coordination between local agencies and freight railroads could encourage the adoption of cleaner technologies and operational practices at the intermodal yards. For example, local agencies could serve as the public-sector sponsor for competitive funding programs, such as CMAP's Congestion Mitigation and Air Quality Improvement (CMAQ) Program, to promote electrification of equipment, expedited gate processing strategies, or delivery appointment systems.

In addition, better coordination between public and private actors could improve longstanding processes. For example, major site developments, such as the major warehousing and distribution facilities that have seen recent growth in Will County, typically involve a traffic impact analysis. The results of these analyses may point to a public sector investment, such as a retimed traffic signal or new turn lane at a nearby arterial intersection. Private stakeholders must understand public-sector processes and programming timelines to ensure that supportive investments are made before substantial new traffic demand is placed on the roadway network.

Role of Technological Advancements

Technological advancements have an important role when shaping the future of freight. For example, they can help meet increasingly strict vehicle and emissions standards, as well as promote more efficient operational practices. Some technologies are not developed enough to be commonly used or are very expensive to adopt. As a result, many of national best practices focused on research and development activities, incentive or subsidy programs to reduce costs, or certification programs to improve the perception of such programs among operators. For example, the proposed Advanced Clean Truck regulation from the California Air Resources Board is another approach to encourage technological advancement by requiring manufacturers to sell an increasing share of zero emissions vehicles (ZEVs) over time. The increasing market for ZEVs would, in addition to spurring research and development activity, promote economies of scale in the production of ZEVs, potentially lowering costs. One way to encourage the adoption of ZEVs is to provide and support charging infrastructure.

In Will County, action at the regional or state levels may be more effective in promoting innovative freight technologies. Further, Will County and municipalities could serve as advocates at the metropolitan and state levels to promote regulatory changes, incentive programs, and other successful strategies identified in the literature review. Potential venues include CMAP and the Illinois State Freight Advisory Committee.

Local agencies in Will County could harness changes in the trucking industry prompted by new regulations at the national level or in other states. For example, as ZEVs begin to represent an increasing share of truck sales and upfront costs decrease over time, Will County and regional partners could develop an incentive program to encourage the adoption of these vehicles on heavily traveled local corridors, such as drayage movements serving the intermodal facilities.

In 2018, the State of Illinois issued an executive order establishing the Autonomous Illinois Initiative. IDOT was designated the leader of this initiative and tasked with promoting the development, testing, and deployment of Connected and Automated Vehicle (CAV) technologies and infrastructure. IDOT has since developed a Vision Plan that emphasizes the need for coordination between all levels of public agencies. Additionally, several federal (e.g., USDOT) and other professional and private or public research groups (e.g., ITE, Center for Automotive Research, American Center for Mobility) have devised similar documentation in support of advancing CAV and providing research and development to help navigate this nascent transportation technology realm. Given the national and state positions on advancing CAV, Will County may want to consider how to best assess its CAV readiness. Additional proactive thought on how Will County's truck network could fit into a larger statewide Truck Platooning Network and any future investments or improvements that would be needed to safely implement truck platooning would help the County stay ahead of the curve in planning for CAV integration.

Appendix A

Appendix A. Change in Designation of Facilities, by Jurisdiction

Table A-1. Changes in Designation, Bolingbrook Facilities

Street Name	Jurisdiction	From	To	Term	Change in Designation
Dalton Ln	Bolingbrook	Rodeo Dr	127th/Remington Blvd/Windham Pkwy	Short	From Undesignated/ Restricted to Class II
Carlow Dr	Bolingbrook	Rodeo Dr	N Weber Rd	Short	From Undesignated/ Restricted to Class II
Lakeview Dr	Bolingbrook	Remington Blvd	SW Frontage Rd	Short	From Undesignated/ Restricted to Class II
115th St	Bolingbrook	Weber Rd	Remington Blvd	Short	From Undesignated/ Restricted to Class II
Territorial Dr	Bolingbrook	Veterans Pkwy	Just south of Remington Lakes Sports Complex	Short	From Undesignated/ Restricted to Class II
Sammons Ct/ Business Center Dr	Bolingbrook	Cul-de-sac	Building	Short	From Undesignated/ Restricted to Class II
Northpoint Ct & Roadways surrounding buildings	Bolingbrook	Territorial Dr	-	Short	From Undesignated/ Restricted to Class II
S Schmidt Rd	Bolingbrook	Remington Blvd	Frontage Rd	Short	From Undesignated/ Restricted to Class II
Woodcreek Dr/ WeatherTech Way	Bolingbrook	Frontage Rd	Timber Ct	Short	From Undesignated/ Restricted to Class II
Timber Ct	Bolingbrook	WeatherTech Way	East to serve industrial buildings/ south to Remington Blvd	Short	From Undesignated/ Restricted to Class II
Quadrangle Dr	Bolingbrook	Remington Blvd	Lily Cache Lane	Short	From Undesignated/ Restricted to Class II
Bolingbrook Commons Roadway Access	Bolingbrook	IL 53	End of complex	Short	From Undesignated/

Street Name	Jurisdiction	From	To	Term	Change in Designation
					Restricted to Class II
Frontage Rd	Bolingbrook	Manor Ct	End of road	Short	From Undesignated/ Restricted to Class II
Veterans Pkwy	Bolingbrook	S Weber Rd	I-55	Short	From Undesignated/ Restricted to Class II
Veterans Pkwy	Bolingbrook	S Weber Rd	Territorial Dr	Short	From Undesignated/ Restricted to Class II
Gateway Dr	Bolingbrook	W Crossroads Pkwy	Frontage Rd	Short	From Undesignated/ Restricted to Class II
Gateway Ct	Bolingbrook	W Crossroads Pkwy	South to end of road	Short	From Undesignated/ Restricted to Class II
Old Chicago Dr	Bolingbrook	Frontage Rd	St James Gate	Short	From Undesignated/ Restricted to Class II
Frontage Rd	Bolingbrook	Old Chicago Dr	Stevenson Dr	Short	From Undesignated/ Restricted to Class II
Stevenson Dr	Bolingbrook	Old Chicago Dr	Frontage Rd	Short	From Undesignated/ Restricted to Class II
St James Gate	Bolingbrook	S Joliet Rd	North to end of road	Short	From Undesignated/ Restricted to Class II
Crossing Rd	Bolingbrook	Gibraltar Dr	International Pkwy	Short	From Undesignated/ Restricted to Class II
E 107th St	Bolingbrook	S Joliet Rd	Beaudin Blvd	Short	From Undesignated/ Restricted to Class II
Wallace Way	Bolingbrook	Beaudin Blvd	Frontage Rd	Short	From Undesignated/ Restricted to Class II
W 127th/Remington Blvd/Windham Pkwy	Multiple (Romeoville, Bolingbrook)	W 135th St	Veterans Pkwy	Short	From Undesignated/ Restricted to Class II

Street Name	Jurisdiction	From	To	Term	Change in Designation
Remington Blvd	Multiple (Bolingbrook, Romeoville)	Rodeo Dr	S Bolingbrook Dr	Short	From Undesignated/ Restricted to Class II
Hosler Dr	Multiple (Bolingbrook, Romeoville)	Crossroads Pkwy	North to end of road	Short	From Undesignated/ Restricted to Class II
S Frontage Rd/Disk Dr/Brunswick Ln	Multiple (Bolingbrook, Romeoville)	W Normantown Rd	End of Disk Dr	Short	From Undesignated/ Restricted to Class II
N Schmidt Rd	Multiple (Bolingbrook, Romeoville)	Veterans Pkwy/Naperville Dr	Frontage Rd	Short	From Undesignated/ Restricted to Class II
Enterprise Dr/Marquette Dr	Multiple (Bolingbrook, Romeoville)	Naperville Dr	E Crossroads Pkwy	Short	From Undesignated/ Restricted to Class II
Gibraltar Dr/Davey Rd	Multiple (Woodridge, Lemont, Bolingbrook)	Crossing Rd	International Pkwy	Short	From Undesignated/ Restricted to Class II
International Pkwy	Multiple (Woodridge, Lemont, Bolingbrook)	Frontage Rd	I-355	Short	From Undesignated/ Restricted to Class II
Marmon Dr	Multiple (Woodridge, Lemont, Bolingbrook)	Davey Rd	E 107th St	Short	From Undesignated/ Restricted to Class II

Table A-2. Changes in Designation, Channahon Facilities

Street Name	Jurisdiction	From	To	Term	Change in Designation
W Bluff Rd	Channahon	I-55	East to end of road	Short	From Undesignated/ Restricted to Class II
S Exchange Blvd	Channahon	W Bluff Rd	North to end of road	Short	From Undesignated/ Restricted to Class II
W Amoco Rd	Channahon	I-55	East to end of road	Short	From Undesignated/ Restricted to Class II
Young Rd/ S Young Rd	Multiple (Channahon, Joliet)	W Amoco Rd	US 6	Short	From Undesignated/ Restricted to Class II
Thomas Dillon Drive	Channahon	US 6	Winchester Drive	Short	From Undesignated/

Street Name	Jurisdiction	From	To	Term	Change in Designation
					Restricted to Class II
Winchester Drive	Channahon	Thomas Dillon Drive	Just west of Remington Dr	Short	From Undesignated/ Restricted to Class II
Frontage Road	Channahon	Bluff Road	US 6	Short	From Undesignated/ Restricted to Class II

Table A-3. Changes in Designation, Crest Hill Facilities

Street Name	Jurisdiction	From	To	Term	Change in Designation
Advantage Ave	Crest Hill	W Division St	South to end of road	Short	From Undesignated/ Restricted to Class II
Churnovic Ln/Lidice Pkwy	Crest Hill	W Division St	Enterprise Blvd	Short	From Undesignated/ Restricted to Class II
Enterprise Blvd	Crest Hill	W Division St	Lidice Pkwy	Short	From Undesignated/ Restricted to Class II

Table A-4. Changes in Designation, Elwood Facilities

Street Name	Jurisdiction	From	To	Term	Change in Designation
W Noel Rd	Elwood	S Baseline Rd	S Brandon Rd	Short	From Undesignated/ Restricted to Class II
S Patterson Rd	Elwood	W Noel Rd	North to Elwood Boundary	Short	From Undesignated/ Restricted to Class II
Centerpoint Way*	Multiple (Joliet, Elwood)	S Baseline Rd	W Laraway Rd	Short	From Undesignated/ Restricted to Class II
S Brandon Rd	Multiple (Joliet, Elwood)	W Noel Rd	W Laraway Rd	Short	From Undesignated/ Restricted to Class II
S Vetter Rd/S Elwood International Port Rd	Multiple (Joliet, Elwood)	Arsenal Rd/W Manhattan Rd	Schweitzer Rd	Short	From Undesignated/ Restricted to Class II
Schweitzer Rd	Multiple (Joliet, Elwood)	Just west of S Vetter Rd	Centerpoint Way	Short	From Undesignated/ Restricted to Class II

Street Name	Jurisdiction	From	To	Term	Change in Designation
*Portions of Centerpoint way are privately owned and operated. Should these roadways transition to being public, they would require a change in designation to Class II.					

Table A-5. Changes in Designation, Joliet Facilities

Street Name	Jurisdiction	From	To	Term	Change in Designation
Houbolt Rd Bridge	Joliet	Intersection of Joliet Rd & S Vetter Rd	Intersection of US 6 & Hollywood/Houbolt Rd	Short	New Class II
Republic Ave	Joliet	US 52/ W Jefferson St	W Glenwood Ave	Short	From Undesignated/ Restricted to Class II
Dollar Tree Ln	Joliet	IL 53	West to end of road	Short	From Undesignated/ Restricted to Class II
Emerald Dr	Joliet	IL 53/ S Chicago St	Just east of Cashel Ln	Short	From Undesignated/ Restricted to Class II
Cashel Ln	Joliet	Emerald Dr	E Laraway Rd	Short	From Undesignated/ Restricted to Class II
Hollywood Blvd/Houbolt Rd	Joliet	US 6	South to end of road	Short	From Undesignated/ Restricted to Class II
Terry Dr	Joliet	US 6	South to end of road	Short	From Undesignated/ Restricted to Class II
S 129th Infantry Dr	Joliet	McDonough St	US 52	Short	From Undesignated/ Restricted to Class II
Caterpillar Dr	Joliet	US 52	South of McDonough St	Short	From Undesignated/ Restricted to Class II
Joyce Rd	Joliet	McDonough	South to end of road	Short	From Undesignated/ Restricted to Class II
McDonough St	Joliet	S 129th Infantry Dr	IL 7	Short	From Undesignated/ Restricted to Class II
Oakleaf St	Joliet	Joyce Rd	East to end of road	Short	From Undesignated/ Restricted to Class II
Vera Ct	Joliet	Oakleaf St	South to end of road	Short	From Undesignated/ Restricted to Class II
S Hammes Ave	Joliet	McDonough St	Oakleaf St	Short	From Undesignated/ Restricted to Class II
Hollywood Rd	Joliet	Channahon Rd/US 6	I-80	Short	From Undesignated/ Restricted to Class II
Rock Creek Blvd	Joliet	Houbolt Rd	West to end of road	Short	From Undesignated/ Restricted to Class II
Crossroads Dr	Joliet	Rock Creek Blvd	Olympic Blvd	Short	From Undesignated/ Restricted to Class II
Olympic Blvd	Joliet	Riverboat Center Dr	Crossroads Dr	Short	From Undesignated/ Restricted to Class II
Houbolt Rd	Joliet	I-80	Olympic Blvd	Short	From Undesignated/ Restricted to Class II
Corporate Dr	Joliet	Houbolt Rd	East to end of road	Short	From Undesignated/ Restricted to Class II
Riverboat Center Dr	Joliet	Corporate Dr	South to end of road	Short	From Undesignated/ Restricted to Class II
Logistics Dr Loop*	Joliet	S Baseline Rd	S Centerpoint Way	Short	From Undesignated/ Restricted to Class II
W Millsdale Rd	Joliet	Centerpoint Way	Railroad tracks	Short	From Undesignated/ Restricted to Class II

Street Name	Jurisdiction	From	To	Term	Change in Designation
W Millsdale Rd	Joliet	IL 53	East to end of road	Short	From Undesignated/ Restricted to Class II
W Laraway Rd	Joliet	Centerpoint Way	Brandon Rd	Short	From Undesignated/ Restricted to Class II
Young Rd/ S Young Rd	Joliet	W Amoco Rd	US 6	Short	From Undesignated/ Restricted to Class II
S Rowell Ave	Joliet	E Laraway Rd	Eunice Ave	Short	From Undesignated/ Restricted to Class II
E Laraway Rd	Joliet	US 52	IL 53	Short	From Undesignated/ Restricted to Class II
Centerpoint Way*	Joliet	S Baseline Rd	W Laraway Rd	Short	From Undesignated/ Restricted to Class II
S Brandon Rd	Multiple (Joliet, Elwood)	W Noel Rd	W Laraway Rd	Short	From Undesignated/ Restricted to Class II
Haven Ave	Multiple (New Lenox, Joliet,)	Cherry Hill Rd	S Gougar Rd	Short	From Undesignated/ Restricted to Class II
Ellis Rd	Multiple (New Lenox, Joliet)	Cherry Hill Rd	S Gougar Rd	Short	From Undesignated/ Restricted to Class II
W Mound Rd	Multiple (Joliet, Rockdale)	I-55	IL 7	Short	From Undesignated/ Restricted to Class II
S Vetter Rd/Baseline Rd	Multiple (Joliet, Elwood)	Arsenal Rd/W Manhattan Rd	Schweitzer Rd	Short	From Undesignated/ Restricted to Class II
Schweitzer Rd	Multiple (Joliet, Elwood)	Just west of S Vetter Rd	Centerpoint Way	Short	From Undesignated/ Restricted to Class II
Schweitzer Rd	Multiple (Joliet/Manhattan)	IL 53	Cherry Hill Rd	Long	From Undesignated/ Restricted to Class II
Center Street	Joliet	I-80	Marion Street	Short	From Undesignated/ Restricted to Class II
Hickory Street	Joliet	Marion Street	Jefferson Street	Short	From Undesignated/ Restricted to Class II
Jefferson Street	Joliet	Raynor Avenue	Center Street	Short	From Undesignated/ Restricted to Class II
Ohio Street	Joliet	Scott Street	Collins Street	Short	From Undesignated/ Restricted to Class II
Hennepin Drive	Joliet	US 30	Division Street	Short	From Undesignated/ Restricted to Class II
Division Street	Joliet	Gaylord Road	Essington Road	Short	From Undesignated/ Restricted to Class II
Essington Road	Joliet	Division Street	US 30	Short	From Undesignated/ Restricted to Class II
Millsdale Road	Joliet	IL 53	E. End	Short	From Undesignated/ Restricted to Class II

Table A-6. Changes in Designation, Lemont Facilities

Term	Jurisdiction	Street Name	From	To	Change in Designation
Long	Lemont	W 127th St	New Ave	Smith Rd	From Undesignated/ Restricted to Class II

Term	Jurisdiction	Street Name	From	To	Change in Designation
Short	Multiple (Romeoville, Lemont, Will County)	W 135th St	New Ave	IL 171	From Undesignated/ Restricted to Class II
Short	Multiple (Lockport, Lemont, Romeoville)	E Romeo Rd	IL 53	New Ave	From Undesignated/ Restricted to Class II
Short	Multiple (Woodridge, Lemont, Bolingbrook)	Gibraltar Dr/Davey Rd	Crossing Rd	International Pkwy	From Undesignated/ Restricted to Class II
Short	Multiple (Woodridge, Lemont, Bolingbrook)	International Pkwy	Frontage Rd	I-355	From Undesignated/ Restricted to Class II
Short	Multiple (Woodridge, Lemont, Bolingbrook)	Marmon Dr	Davey Rd	E 107th St	From Undesignated/ Restricted to Class II

Table A-7. Changes in Designation, Lockport Facilities

Term	Jurisdiction	Street Name	From	To	Change in Designation
Short	Lockport	S Gougar Rd	167 th St	W 143 rd St	From Undesignated/ Restricted to Class II
Long	Lockport	S Gougar Rd	167 th St	W Bruce Rd	From Undesignated/ Restricted to Class II
Short	Lockport	W 147th St	Lemont Rd	End of road	From Undesignated/ Restricted to Class II
Short	Lockport	S Briggs St	US 6	W Bruce Rd	From Undesignated/ Restricted to Class II
Short	Lockport	S Cedar Rd	IL 7	US 6	From Undesignated/ Restricted to Class II
Short	Lockport	New Ave	IL 171	135 th St	From Undesignated/ Restricted to Class II
Long	Lockport	Bruce Rd	S Briggs St	S Cedar Rd	From Undesignated/ Restricted to Class II
Long	Lockport	I-355 On/Off Ramps	Bruce Rd	NA	New Facility

Table A-8. Changes in Designation, New Lenox Facilities

Term	Jurisdiction	Street Name	From	To	Change in Designation
Short	Multiple (New Lenox, Joliet,)	Haven Ave	Cherry Hill Rd	S Gougar Rd	From Undesignated/ Restricted to Class II
Short	Multiple (New Lenox, Joliet)	Ellis Rd	Cherry Hill Rd	S Gougar Rd	From Undesignated/ Restricted to Class II

Table A-9. Changes in Designation, Plainfield Facilities

Term	Jurisdiction	Street Name	From	To	Change in Designation
Short	Plainfield	143 rd St	IL 59	IL 126	New Facility
Long	Plainfield	143 rd St	IL 126	Frontage Rd west of I-55	From Undesignated/ Restricted to Class II

Table A-10. Changes in Designation, Rockdale Facilities

Term	Jurisdiction	Street Name	From	To	Change in Designation
Short	Rockdale	Moen Ave	Mound Rd	IL 7	From Undesignated/ Restricted to Class II
Short	Rockdale	Gould Ct	Moen Ave	South to end of road	From Undesignated/ Restricted to Class II
Short	Rockdale	Maxin Dr	Moen Ave	South to end of road	From Undesignated/ Restricted to Class II
Short	Rockdale	S Harris Dr	Moen Ave	South to end of road	From Undesignated/ Restricted to Class II
Short	Rockdale	Crescent Way	Moen Ave	Moen Ave	From Undesignated/ Restricted to Class II
Short	Multiple (Joliet, Rockdale)	W Mound Rd	I-55	IL 7	From Undesignated/ Restricted to Class II
Short	Rockdale	Terminal Ct	Channahon Rd/US 6	North of Illinois & Michigan Channel	From Undesignated/ Restricted to Class II
Short	Rockdale	SE Frontage Rd	IL 7	West to end of road	From Undesignated/

Term	Jurisdiction	Street Name	From	To	Change in Designation
					Restricted to Class II
Short	Rockdale	Walnut Ct	SE Frontage Rd	South to end of road	From Undesignated/ Restricted to Class II
Short	Rockdale	Oakwood Ct	SE Frontage Rd	South to end of road	From Undesignated/ Restricted to Class II
Short	Rockdale	Elm Ct	SE Frontage Rd	South to end of road	From Undesignated/ Restricted to Class II

Table A-11. Changes in Designation, Romeoville Facilities

Term	Jurisdiction	Street Name	From	To	Change in Designation
Short	Romeoville	Arbor Dr	Lakeview Dr	End of Road	From Undesignated/ Restricted to Class II
Short	Romeoville	W Airport Road/ Southcreek Pkwy	S Weber Rd	Taylor Rd	From Undesignated/ Restricted to Class II
Short	Romeoville	Taylor Rd	S Weber Rd	IL 53	From Undesignated/ Restricted to Class II
Short	Romeoville	W Chicago Tube Dr	Southcreek Pkwy	West to end of road	From Undesignated/ Restricted to Class II
Short	Romeoville	S Ohare Dr	W Airport Rd	S Pinnacle Dr	From Undesignated/ Restricted to Class II
Short	Romeoville	Midway Dr	W Airport Rd	S Ohare Dr	From Undesignated/ Restricted to Class II
Short	Romeoville	S Pinnacle Dr	Just north of S Ohare Dr	Taylor Rd	From Undesignated/ Restricted to Class II
Short	Romeoville	Joliet Community College Trail	Taylor Rd	Just south of Hammon Trail	From Undesignated/ Restricted to Class II
Short	Romeoville	Belmont Dr	Taylor Rd	Just south of Hammon Trail	From Undesignated/ Restricted to Class II

Term	Jurisdiction	Street Name	From	To	Change in Designation
Short	Romeoville	N Paragon Dr	Taylor Rd	Belmont Dr	From Undesignated/ Restricted to Class II
Short	Romeoville	E Montrose Dr	IL 53	Anderson Dr	From Undesignated/ Restricted to Class II
Short	Romeoville	E Belmont Dr	IL 53	Anderson Dr	From Undesignated/ Restricted to Class II
Short	Romeoville	Bull Run Dr	IL 53	Anderson Dr	From Undesignated/ Restricted to Class II
Short	Romeoville	Greenwood Dr/Forestwood Dr	IL 53	North to end of road	From Undesignated/ Restricted to Class II
Short	Romeoville	Phelps Ave	IL 53	Devonwood Ave	From Undesignated/ Restricted to Class II
Short	Romeoville	Devonwood Ave	IL 53	Parkwood Ave	From Undesignated/ Restricted to Class II
Short	Romeoville	Parkwood Ave	IL 53	Ridgewood Ave	From Undesignated/ Restricted to Class II
Short	Romeoville	Ridgewood Ave/Rochbaar Dr	IL 53	Forestwood Dr	From Undesignated/ Restricted to Class II
Short	Romeoville	Oakridge Dr	Ridgewood Ave	North to end of road	From Undesignated/ Restricted to Class II
Short	Romeoville	Normantown Rd	W 135th St	Split in road for W Normantown & W Crossroads Pkwy	From Undesignated/ Restricted to Class II
Short	Romeoville	N Center Blvd	N Normantown Rd	Just before N Center Blvd curves to the east	From Undesignated/ Restricted to Class II
Short	Romeoville	W/E Crossroads Pkwy	N Normantown Rd	IL 53	From Undesignated/ Restricted to Class II
Short	Romeoville	Theodore Ct	W Crossroads Pkwy	South to end of road	From Undesignated/ Restricted to Class II

Term	Jurisdiction	Street Name	From	To	Change in Designation
Short	Romeoville	N Prologis Pkwy	W Crossroads Pkwy	South to end of road	From Undesignated/ Restricted to Class II
Short	Romeoville	Veterans Pkwy	W Crossroads Pkwy	I-55	From Undesignated/ Restricted to Class II
Short	Romeoville	W South Frontage Rd	Veterans Pkwy	Northeast to end of road	From Undesignated/ Restricted to Class II
Short	Romeoville	Naperville Dr	Enterprise Dr	Marquette Dr	From Undesignated/ Restricted to Class II
Short	Romeoville	Lakeside Dr	Enterprise Dr/Marquette Dr	Naperville Dr	From Undesignated/ Restricted to Class II
Short	Romeoville	Chambers Dr	Naperville Dr	IL 53	From Undesignated/ Restricted to Class II
Short	Romeoville	Sherman Rd	S Joliet Rd	Bluff Rd	From Undesignated/ Restricted to Class II
Short	Romeoville	Bluff Rd	S Joliet Rd	Northwest to end of road	From Undesignated/ Restricted to Class II
Short	Multiple (Romeoville, Bolingbrook)	W 127th/Remington Blvd/Windham Pkwy	W 135th St	Veterans Pkwy	From Undesignated/ Restricted to Class II
Short	Multiple (Bolingbrook, Romeoville)	Remington Blvd	Rodeo Dr	S Bolingbrook Dr	From Undesignated/ Restricted to Class II
Short	Romeoville	W Division St	US 30	Weber Rd	From Undesignated/ Restricted to Class II
Short	Romeoville	E Romeo Rd	IL 53	New Ave	From Undesignated/ Restricted to Class II
Short	Multiple (Romeoville, Lemont, Will County)	W 135th St	New Ave	IL 171	From Undesignated/ Restricted to Class II
Short	Multiple (Lockport, Lemont, Romeoville)	E Romeo Rd	IL 53	New Ave	From Undesignated/ Restricted to Class II

Term	Jurisdiction	Street Name	From	To	Change in Designation
Short	Romeoville	S Material Rd	IL 53	Just east of Des Plains River	From Undesignated/ Restricted to Class II
Short	Romeoville	Anderson Dr	E Montrose Dr	North to end of road	From Undesignated/ Restricted to Class II
Short	Multiple (Bolingbrook, Romeoville)	Hosler Dr	Crossroads Pkwy	North to end of road	From Undesignated/ Restricted to Class II
Short	Multiple (Bolingbrook, Romeoville)	S Frontage Rd/Disk Dr/Brunswick Ln	W Normantown Rd	End of Disk Dr	From Undesignated/ Restricted to Class II
Short	Multiple (Bolingbrook, Romeoville)	N Schmidt Rd	Veterans Pkwy/Naperville Dr	Frontage Rd	From Undesignated/ Restricted to Class II
Short	Multiple (Bolingbrook, Romeoville)	Enterprise Dr/Marquette Dr	Naperville Dr	E Crossroads Pkwy	From Undesignated/ Restricted to Class II

Table A-12. Changes in Designation, Woodridge Facilities

Term	Jurisdiction	Street Name	From	To	Change in Designation
Short	Woodridge	Katherines Crossing	Davey Rd	South to end of road	From Undesignated/ Restricted to Class II
Short	Woodridge	Beaudin Blvd	International Pkwy	Wallace Way	From Undesignated/ Restricted to Class II
Short	Multiple (Woodridge, Lemont, Bolingbrook)	Gibraltar Dr/Davey Rd	Crossing Rd	International Pkwy	From Undesignated/ Restricted to Class II
Short	Multiple (Woodridge, Lemont, Bolingbrook)	International Pkwy	Frontage Rd	I-355	From Undesignated/ Restricted to Class II
Short	Multiple (Woodridge, Lemont, Bolingbrook)	Marmon Dr	Davey Rd	E 107th St	From Undesignated/ Restricted to Class II

Appendix B

Appendix B. Previously Identified Projects and Other Background Research

This appendix identifies a detailed set of projects to facilitate truck movements across the recommended truck route network in western Will County, as well as address asset condition, safety, and congestion needs that impact all roadway users. Many of the projects identified in the follow three sections – previously planned projects, asset condition needs, and modernization needs – contribute to key corridors identified in the Moving Will County Investment Plan to Support Truck Routes.

Note: The projects and corridors listed in this Appendix are not necessarily recommended Class II Truck Routes as a part of this study. Instead, this Appendix provides supporting documentation of research that the project team conducted to identify ongoing/future projects and roads in need of improvements per stakeholder engagement and the Existing Conditions Report. Some of these roads listed in Appendix B are recommended Class II truck routes in this study and some are not, although they may connect to truck routes or major truck-generating areas. The findings from this section assisted in identifying needed capital improvements and aided in developing the recommended truck route network.

Previously Planned Projects

This section briefly reviews projects identified in two previous planning efforts, the Will County Long Range Transportation Plan (2017) and Will County Community Friendly Freight Mobility Plan (2017). It also includes projects currently programmed in the CMAP Transportation Improvement Program, including ON TO 2050 Regionally Significant Projects (2018), as of October 2020. These various sources were reviewed by the project team, and the projects that would best facilitate truck travel on the recommended truck network in the Moving Will County study are shown in **Table B-1** below.

Table B-1. List of Previously Identified Projects

Designation	Facility	Location	Improvement Type	Cost ³⁶	CMAP TIP ID	Other Plans
Proposed Class II	143rd St Extension (Segment 1)	IL 59 to IL 126	New facility	\$ 57,222,175	12-06-0013	
Proposed Class II	143rd St Extension (Segment 2)	IL 126 to Lockport Street/I-55	New facility			Village of Plainfield
Conceptual Alignment	Caton Farm-Bruce Rd	US 30 to IL 7/159th St	Road expansion	\$ 550,950,000	12-00-0035	
Proposed Class II	Cedar Rd	Over Spring Creek (between Bruce Rd and Chicago Bloomington Trl)	Bridge improvement	\$ 2,475,502	12-02-0010	
Proposed Class II	Centerpoint Way	at Schweitzer Road and at UP JIT gate	Intersection improvements			WCCFFMP
Proposed Class II	Centerpoint Way	Millsdale Road to Schweitzer Road	Add lanes and intersection improvements			WCCFFMP
Proposed Class II	Gougar Rd	Laraway Rd to US 30	Road expansion		12-19-0038	Will County L RTP
Proposed Class II	Houbolt Rd	Houbolt Rd extension/Des Plaines River bridge	Road expansion	\$ 155,000,000	12-18-0007	
Proposed Class II	Houbolt Rd	I-80 to US 6	Road expansion	\$ 31,813,000	12-18-0006	
Existing Class I	I-55	I-80 to Coal City Rd	Road expansion; bridge improvements	\$ 750,000,000	12-02-9034	ON TO 2050 RSP 34
Existing Class I	I-55	I-355 to IL 53/Bolingbrook Dr	Road expansion	\$ 22,500,000	08-19-0042	
Existing Class I	I-55	at IL 129 and at Lorenzo Rd	New/expanded Interchange	\$ 140,103,000	12-16-0027	ON TO 2050 RSP 34
Existing Class I	I-55	at IL 59 and US 52 interchanges	New/expanded Interchange	\$ 203,790,805	12-18-0019; 12-18-0004	ON TO 2050 RSP A4
Existing Class I	I-55	at Airport/Lockport Rd and at IL 126	New/expanded Interchange	\$ 182,849,000	12-06-0041	
Existing Class I	I-80	Ridge Rd to US/30 Lincoln Hwy	Road expansion	\$ 1,250,212,000	09-12-0036	ON TO 2050 RSP 36
Existing Class I	I-80	at Briggs St	Interchange improvements			Will County L RTP
Existing Class I	I-80	at US 52/IL 53/Chicago St	Interchange improvements			Will County L RTP; WCCFFMP

³⁶ Cost data comes from the CMAP TIP or previously published plan (e.g., Will County L RTP).

Designation	Facility	Location	Improvement Type	Cost ³⁶	CMAP TIP ID	Other Plans
Existing Class I	I-80	at IL 7/Larkin Ave	Interchange improvements			WCCFFMP
Existing Class II	IL 53	Caton Farm Road to IL 7/Theodore St (under EJ&E Railroad)	Rail-Highway Crossing Improvements	\$ 34,725,000	12-06-0061	
Existing Class II	IL 53	US 52 to Arsenal Rd.	Intersection improvements	\$ 48,580,000	12-17-0005	
Existing Class II	IL 53	at South Arsenal Rd	Intersection improvements	\$ 3,644,000	12-13-0015	
Existing Class II	IL 53	at Normantown Rd/Devonwood Ave	Intersection improvements	\$ 3,200,000	12-19-0005	
Existing Class II	IL 53	at Wilmington-Peotone Rd	Intersection improvements	\$ 2,760,509	12-14-0013	
Existing Class II	IL 53	at Emerald Drive	Intersection improvements	\$ 2,659,974	12-18-0030	
Existing Class II	IL 53	at IL 7/Renwick Rd	Intersection improvements	\$ 870,000	12-19-0031	
Existing Class II	IL 53	at North River Rd	Intersection improvements	\$ 495,310	12-16-0010	
Existing Class II	IL 53	at Laraway Road	Intersection improvements (add lanes)			Will County LRTP, WCCFFMP
Existing Class II	IL 59	at Champion Dr	Intersection improvements	\$ 1,160,000	12-18-0008	
Existing Class II	IL 59	at Black Rd	Intersection improvements	\$ 4,690,000	12-20-0094	
Existing Class II /Undetermined	Laraway Rd	US 52 to IL 43/Harlem Ave ³⁷	Road expansion	\$ 62,913,885	12-13-0004	ON TO 2050 RSP 55
Proposed Class II	Laraway Rd	IL 53 to US 52	Road expansion	\$ 44,200,000		Will County LRTP
Proposed Class II	Moen Ave	Mound Rd to IL 7/Larkin Ave	Road modernization	\$ 5,134,289	12-09-0088	
Proposed Class II	Olympic Blvd	Olympic Boulevard Extension from Houbolt Rd to I-55	New facility			City of Joliet
Proposed Class II	Schweitzer Rd	Rowell Ave to US 52	Road expansion	\$ 28,700,000		Will County LRTP
Existing Class II	US 30/Jefferson St	Over Des Plaines River (west of Joliet St)	Bridge improvement	\$ 30,156,248	12-17-0003	
Trucks Not Preferred/Proposed Class II	US 52	Spencer Rd to US 45/LaGrange Rd	Safety	\$ 1,710,594	12-15-0022	
Proposed Class II	US 52	at Gougar Rd and Smith Rd	Intersection improvements	\$ 2,200,000	12-11-0050	

³⁷ Note that the CMAP RSP and TIP ID include an eastern terminus of US 45, which is further east than the proposed Class II truck route designation.

Designation	Facility	Location	Improvement Type	Cost ³⁶	CMAP TIP ID	Other Plans
Trucks Not Preferred/Proposed Class II	US 52	IL 53 to US 45	Add lanes and intersection improvements			Will County LRTP
Proposed Class II	US 52	Manhattan-Monee Rd to Laraway Rd	Road expansion	\$ 70,800,000		Will County LRTP
Trucks Not Preferred	US 52	IL 53 to Laraway Rd	Road expansion			WCCFFMP
Existing Class II	US 6	I-55 to I-80	Add lanes			Will County LRTP; WCCFFMP
Proposed Class II*	Wilmington-Peotone Rd	IL 53 to Drecksler Rd	Road expansion	\$ 57,900,000	12-18-0021	ON TO 2050 RSP 56

*Design concepts and other planning-level recommendations for corridor is in Appendix C. Priority Project Concepts and Design Considerations Toolkit

Identification of Asset Condition Needs

The Existing Conditions Report (March 2020) identified locations of low pavement quality (measured by both the Condition Rating Survey and Pavement Condition Index), as well as bridge condition, load-limited bridges, and low vertical clearance bridges. The project team cross-referenced the Existing Conditions Report with the recommend truck route network, using thresholds of less than “fair” for pavement³⁸, poor for bridge conditions (on a scale of good/fair/poor), all load limited bridges, and vertical clearances of 13 feet 6 inches or lower to identify potential project locations. **Table B-2** below lists the results.

Table B-2. List of Potential Asset Condition Needs

Designation	Facility	Location	Asset Condition Needs
Proposed Class II	US 52	Over Forked Creek (between Arsenal Rd and Wallingford Trail)	Bridge improvement
Proposed Class II	Laraway Rd	Between Rowell Ave and US 52	Pavement improvement
Proposed Class II	Gougar Rd	Between Haven Ave and US 30	Pavement improvement
Proposed Class II	Gougar Rd	Over I-80	Bridge improvement
Proposed Class II	135th St	Between Smith Rd and Archer Ave	Pavement improvement
Proposed Class II	Briggs St	Between I-80 and US 52/Manhattan Rd	Pavement improvement
Proposed Class II	Cherry Hill Rd	Over Jackson Creek (between Schweitzer Rd and Bernhard Rd)	Bridge improvement
Proposed Class II	Cherry Hill Rd	Over Jackson Creek (north of Manhattan Rd)	Bridge improvement
Proposed Class II	Veterans Pkwy	Between Crossroads Pkwy and Weber Rd	Pavement improvement

³⁸ The scale of pavement condition varies across measures. The Condition Rating Survey (CRS) rates pavement on a scale of poor, fair, satisfactory, or excellent. The Pavement Condition Index (PCI) rates pavement on a scale of failed, serious, very poor, poor, fair, satisfactory, or good.

Designation	Facility	Location	Asset Condition Needs
Proposed Class II	Brunswick Ln/S Frontage Rd	Normantown Rd to termini	Pavement improvement
Proposed Class II	Frontage Rd (Channahon)	Between Bluff Rd and US 6	Pavement improvement
Proposed Class II	129th Infantry Dr	Between McDonough St and US 52	Pavement improvement
Proposed Class II	Haven Ave	Between Cherry Hill Rd and Gougar Rd	Pavement improvement
Proposed Class II	Mound Rd	Between Hollywood Rd and Moen Ave	Pavement improvement
Proposed Class II	Center Street	Between Pleasant St and Marion St	Pavement improvement
Proposed Class II	Ohio St	Viaduct carrying railroad over Ohio Street (between State St and Scott St)	Bridge improvement
Proposed Class II	Division St	Between Gaylord Rd and Essington Rd	Pavement improvement
Proposed Class II	127th St	Between New Ave and Smith Rd	Pavement improvement
Proposed Class II	Bruce Rd	Between Cedar Rd and Gougar Rd	Pavement improvement
Proposed Class II	Bruce Rd	Over Fraction Run (between Briggs St and Farrell Rd)	Bridge improvement
Proposed Class II	Frontage Rd (Rockdale)	Until Meadow Ave	Pavement improvement
Proposed Class II	Crossroads Pkwy	Between Veterans Pkwy and IL 53	Pavement improvement
Proposed Class II	Remington Blvd	Between 115th St and Veterans Pkwy	Pavement improvement
Existing Class II	IL 53	Between US 52 and Manhattan Rd	Pavement improvement
Existing Class II	IL 53	Bridge carrying Henslow Trl over IL 52	Bridge improvement
Existing Class II	IL 53/Chicago St	Two viaducts carrying UP and BNSF over IL 53 (south of Patterson Rd)	Bridge improvement
Existing Class II	IL 53/Ruby St	Over Des Plaines River (near Bluff St)	Bridge improvement
Existing Class II	IL 53	2 viaducts carrying railroad over IL 53 (south of Washington St): Chicago St northbound, Ottawa St southbound	Bridge improvement
Existing Class II	IL 53/Broadway Street	Viaduct carrying railroad over IL 53 (north of Chaney Ave)	Bridge improvement
Existing Class I	I-55	Over IL 53	Bridge improvement
Existing Class II	US 30/Cass St	Viaduct carrying railroad over US 30 (east of Highland Park Dr)	Bridge improvement
Existing Class II	US 30/Cass St	Viaduct carrying railroad over US 30 (east of IL 53)	Bridge improvement
Existing Class II	US 30/Lincoln Hwy	Viaduct carrying railroad over US 30 (east of Prairie Rd)	Bridge improvement
Existing Class II	US 30/Jefferson St	Viaduct carrying railroad over US 30 (east of IL 53)	Bridge improvement
Existing Class II	Caton Farm Rd	Between Weber Rd and IL 7	Pavement improvement
Existing Class II	IL 171	Viaduct carrying railroad over IL 171 (north of Woodruff Rd)	Bridge improvement

Designation	Facility	Location	Asset Condition Needs
Existing Class II	IL 7/9th St	Over creek (South of 7th St)	Bridge improvement
Existing Class II	IL 7/9th St	Over Des Plaines River	Bridge improvement
Existing Class II	River Rd	Near I-55 intersection	Pavement improvement
Existing Class II	IL 53/Scott St	Viaduct carrying railroad over IL 53 (north of Irving St)	Bridge improvement
Existing Class II	US 30/Jefferson St	East of Bluff St	Bridge improvement

Identification of Improvements Needs

Over the course of the planning study, various other system needs were identified by local stakeholders, including local public agencies and members of the general public. These ideas range widely in their level of development. Some projects are currently under some level of development but are not listed in a previous county- or regional-level study or programmed in the CMAP TIP. Others are very preliminary project concepts that identify basic deficiencies at the site or corridor level. Examples of the latter include public comments that indicate safety concerns at specific intersections, such as poor sightlines or difficulty making turning movements, as well as requests for new traffic signals. In all cases, additional study is required to identify purpose and need for future projects, as well as the appropriate scope of improvements. **Table B-3** below lists these locations. Design concepts and other planning-level recommendations for IL 53 are in **Appendix C**. Priority Project Concepts and Design Considerations Toolkit.

Table B-3. List of Potential Improvement Needs

Designation	Facility	Location	Improvement Type
Proposed Class II	127th St	New Avenue to Smith Road	Road expansion study
Undetermined	Briggs St	at Illinois Highway/Spencer Rd	Intersection study
Undetermined	Briggs St	at New Lenox Rd	Intersection study
Proposed Class II	Gardner St	at Doris Ave	Intersection study
Existing Class I	I-355	at Bruce Rd	Intersection study
Existing Class II	IL 53*	I-55 to Romeo Road/135th Street	Intersection study (multiple locations)
Existing Class II	IL 53*	Romeo Road/135th Street to Renwick Road	Road expansion study
Existing Class II	IL 53*	at 135th Street/Renwick Road	Intersection study
Existing Class II	IL 53*	at Taylor Road	Intersection study
Existing Class II	IL 53	at Mississippi St	Intersection study
Existing Class II	Laraway Rd	at UPRR (west of IL 53)	Grade separation study

Designation	Facility	Location	Improvement Type
Proposed Class II	Mills Rd	at Cherry Hill Rd	Intersection study
Proposed Class II	New Ave	Romeo Road/135th Street to I-355	Road improvements study
Proposed Class II	Noel Rd	Elwood International Port Rd to Brandon Rd	Road expansion study
Trucks Not Preferred	US 52	at Richards St	Intersection study
Trucks Not Preferred	US 52	at Mills Rd	Intersection study
Trucks Not Preferred	US 52	at Rowell Ave	Intersection study
Trucks Not Preferred	US 52	at Illinois Highway/Spencer Rd	Intersection study
Proposed Class II	US 52/Jefferson St	I-55 to US 30	Traffic signal study
Proposed Class II Conceptual Alignment	Vetter Rd US 52 Bypass	Schweitzer Rd to north of Centerpoint Way Approximately along Cherry Hill Rd and Bruns Rd Redesignate state routes and truck designations from IL 7 and IL 171 in downtown Lockport to other existing segments	Road expansion study Corridor study
Proposed Class II	Lockport Bypass		Corridor study

***Design concept and other planning-level recommendations for these recommended improvements are in Appendix C. Priority Project Concepts and Design Considerations Toolkit**

Appendix C

Appendix C. Priority Project Concepts and Design Considerations Toolkit

This appendix includes several conceptual ideas for corridors that were identified as priority projects. The last few pages contain a toolkit of design treatments that could be considered when modifying other similar corridors in Will County in order to accommodate heavier truck traffic with safety measures in mind for all modes.

Wilmington-Peotone Road

from IL 53 to Eastern Border of Truck Routing Study Area

- Truck Routing Study Area
- Left Turn Lanes
- Traffic Signals

Existing Conditions



Wilmington-Peotone Road

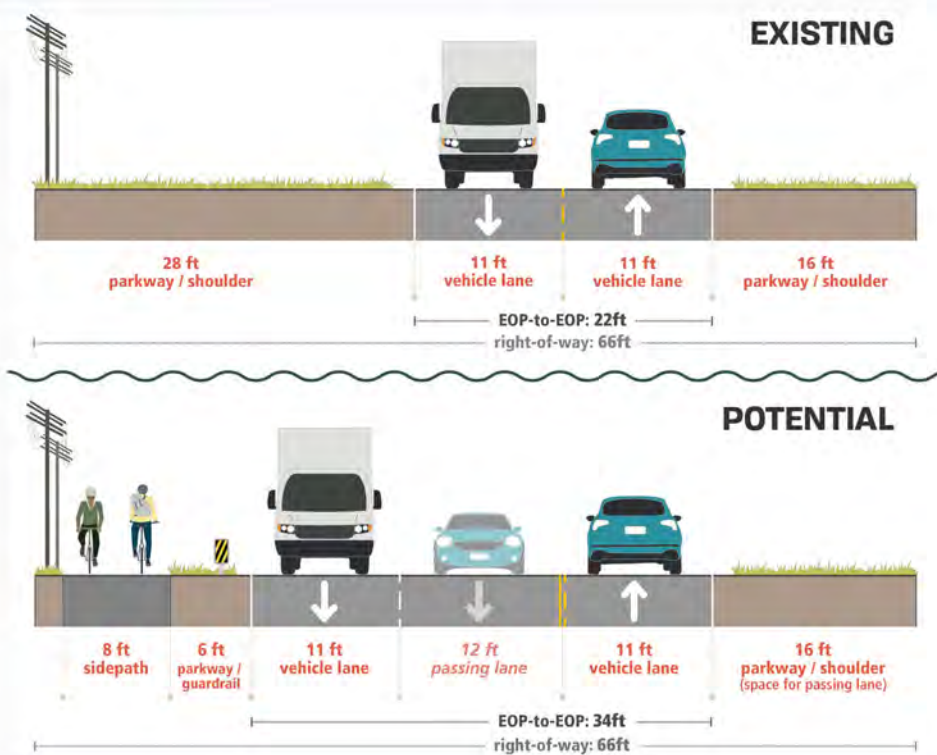
from IL 53 to Eastern Border of Truck Routing Study Area

-  Truck Routing Study Area
-  Left Turn Lanes
-  Traffic Signals

Recommendations

At a 6,650 vehicles per day, existing daily traffic volumes are well below levels where wholesale widening to provide two lanes in each direction would be required. However, with an expected increase of slower moving truck traffic on this road, installing passing lanes would allow for traffic to more safely bypass slower-moving vehicles. To accommodate this, the potential cross section could include passing lanes at key locations. An isolated passing lane is shown below but other options like side-by-side, separated, or overlapping passing lanes should also be considered (see diagram in the Roadway and Intersection Improvement Toolkit). A new sidepath is also illustrated in the cross section, which is included in previous studies and will connect to existing and planned bike trails. Left turn lanes (such as the example pictured at Old Chicago Rd and Peotone Rd) should be installed at all key intersections, which will help prevent rear-end crashes as volumes increase.

1. Include left turn lanes at key intersections, using Chicago Rd and Peotone Rd as an example.
2. Improve lighting along the corridor, including at intersections and passing lanes.
3. Passing lane advanced signage example.
4. Passing lane example.



Potential Cross Section

Right-of-way widths vary along Wilmington-Peotone Rd so further study would be needed to determine the exact configuration of recommendations, including the location of the sidepath and passing lanes. Considerations for future improvements are listed below.

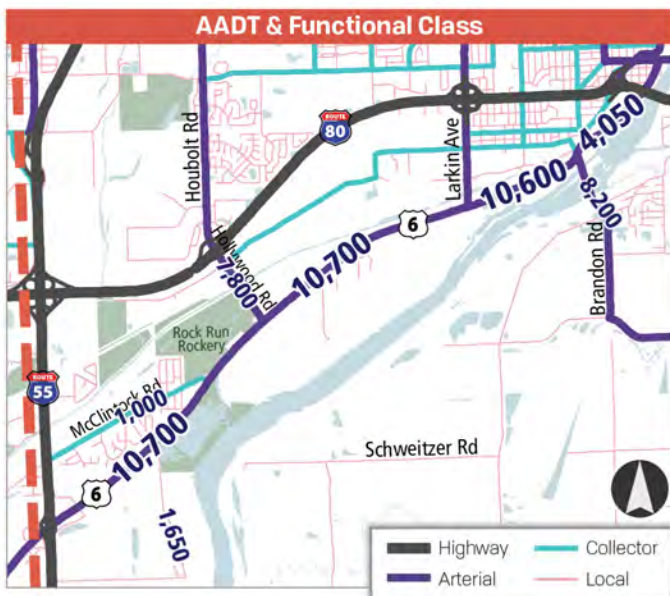
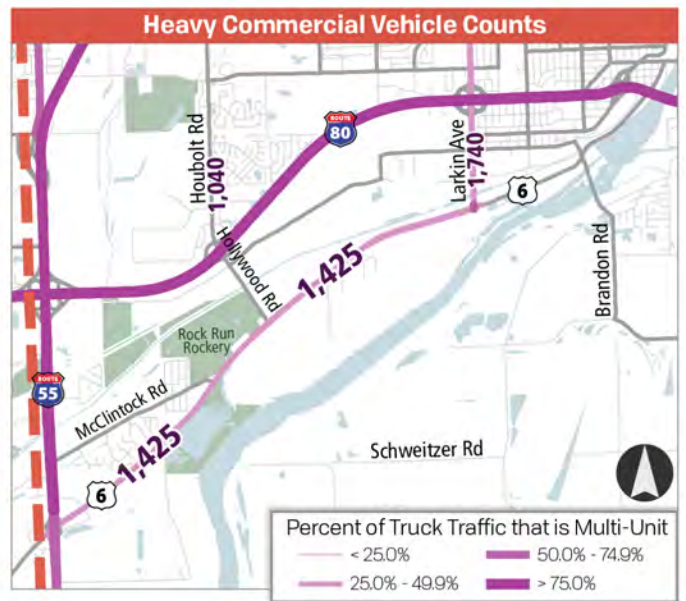
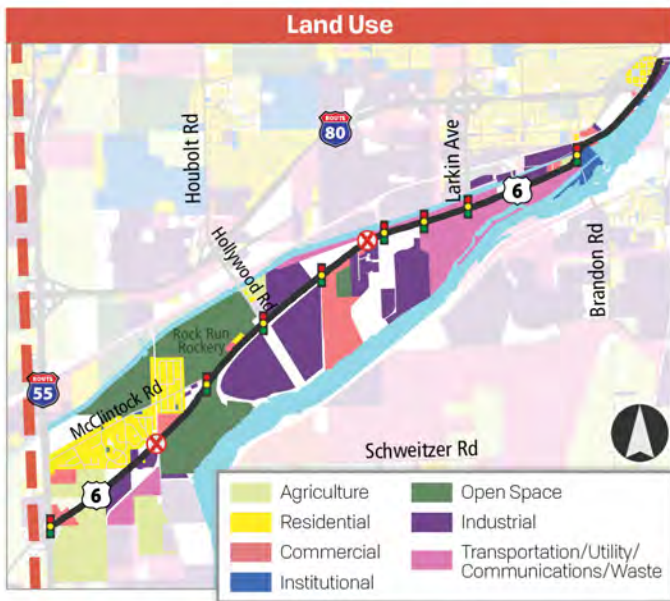
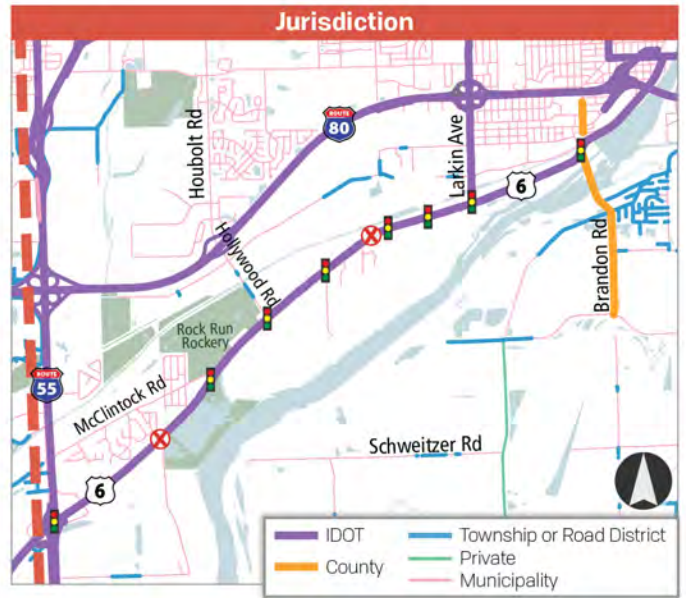
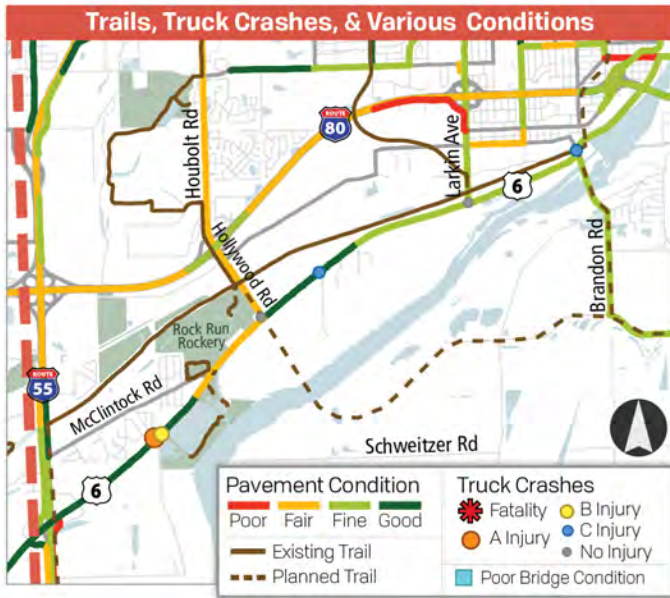
- The sidepath should be configured so there is space for the passing lanes at various spots along corridor. The north side of the street appears to have more available right-of-way, and therefore may be the best location to accommodate both.
- Install guardrails or rumble strips on the side of the road that has the sidepath. If only minimal separation can be maintained between the vehicle lanes and sidepath, guardrail warrants would likely be met in lieu of rumble strips.
- Include advanced signage with installation of the passing lanes.
- AADT should be greater than 10,000 VPD (vehicles per day) before considerations are made to widen the whole roadway to four or five lanes (two in each direction).

Route 6

from I-55 (western border of Truck Routing Study Area) to I-80




- Truck Routing Study Area
- At-Grade Railroad Crossing
- Traffic Signals

Existing Conditions



Route 6

from I-55 (western border of Truck Routing Study Area) to I-80

-  Truck Routing Study Area
-  At-Grade Railroad Crossing
-  Traffic Signals

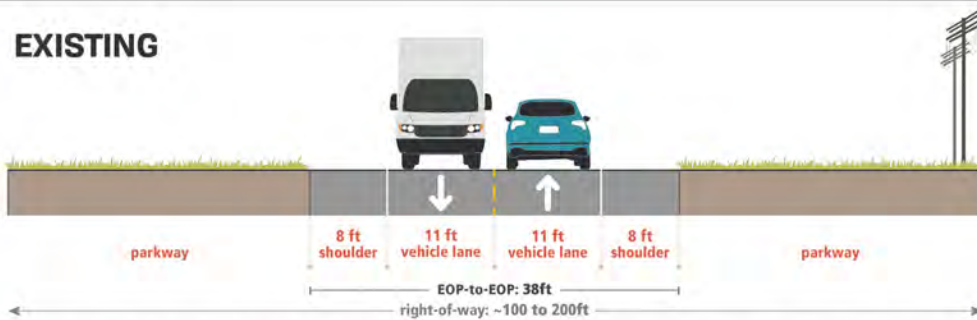
Recommendations

With the Houbolt Road bridge opening, there will likely be a heavier increase in truck traffic heading to I-80 and I-55 and impact Route 6. Portions of the corridor already have a five lane cross section (such as the stretch to northeast of Terry Dr). It is recommended that the five lane cross section is continued throughout the corridor, such as between Terminal Court and I-55. A five lane cross section will provide a place for larger vehicles (such as trucks and school buses) to conduct safety stops at railroad crossings without blocking through traffic. In the interim, consider spot widening to provide safety stop lanes at railroad crossings and consider installing a temporary or permanent barrier median to prevent vehicles from driving around gates. Also, consider improvements to at-grade railroad crossings to alleviate delays that may continue to increase in the future due to the growing intermodal market and potential for more rail traffic with the CN and KCS merger. Another interim improvement is implementing better lighting along the entire stretch of the corridor. If vehicle volumes do not warrant a five lane cross section, three lanes could also be considered. This would include a center turn lane so that vehicles can get out of traffic when turning, which would reduce rear-end crashes.

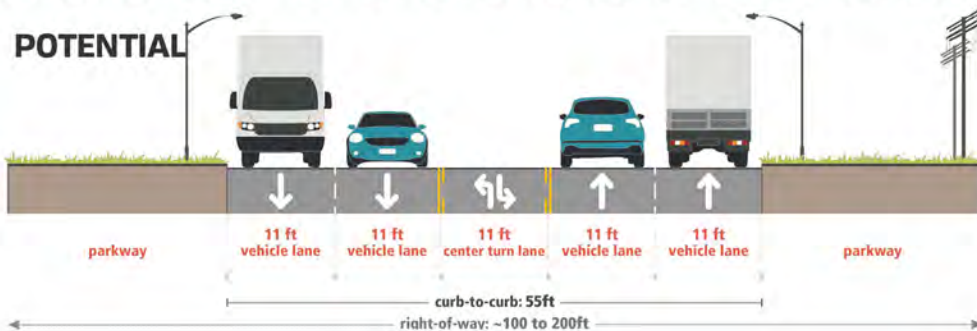
1. Recent roadway improvements from I-55 to just past Thomas Dillon Dr/Bradley St expanded Route 6 from two/three lanes to five lanes.
2. Example of a bollard barrier median installed at a railroad crossing.



EXISTING



POTENTIAL



Potential Cross Section

The five lane cross section would provide two travel lanes in each direction and a center turn lane. This cross section currently exists on IL 53 northeast of Terry Dr as well as closer to I-55.

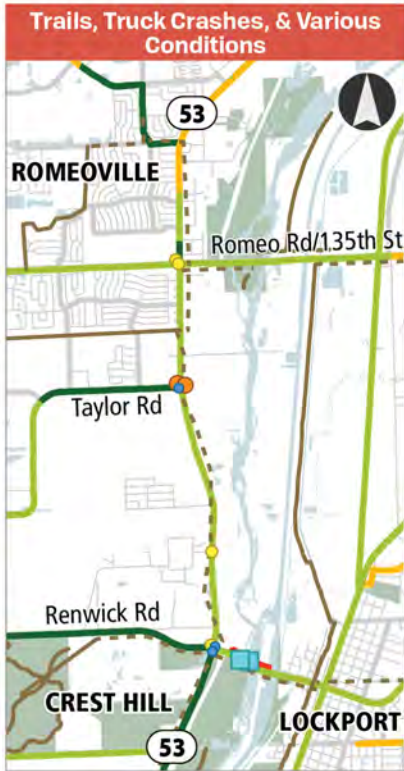
- The center lane can either be a barrier median at railroad crossings or left turn lane at intersections.
- The right lane provides a place for larger vehicles to make safety stops at railroad crossings.
- If traffic volumes do not warrant a five lane cross section, three lanes can also be considered.
- Providing lighting along the entire corridor is an additional consideration to improve safety.

IL 53 Intersection Improvements

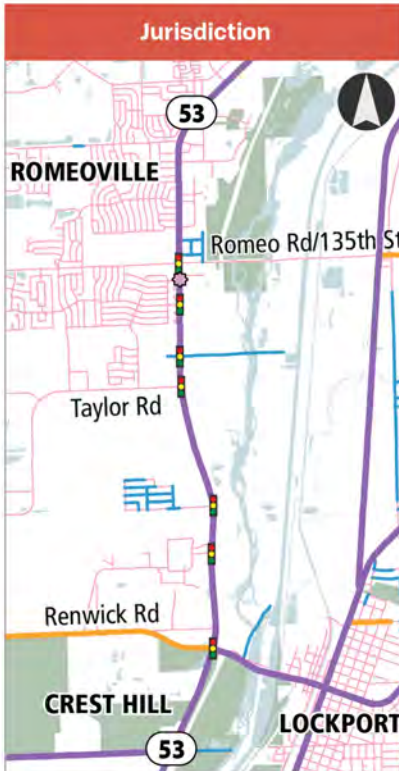
Northern Study Area | from Romeo Rd/135th St to Renwick Rd

- Truck Routing Study Area
- Left Turn Lanes
- Traffic Signals

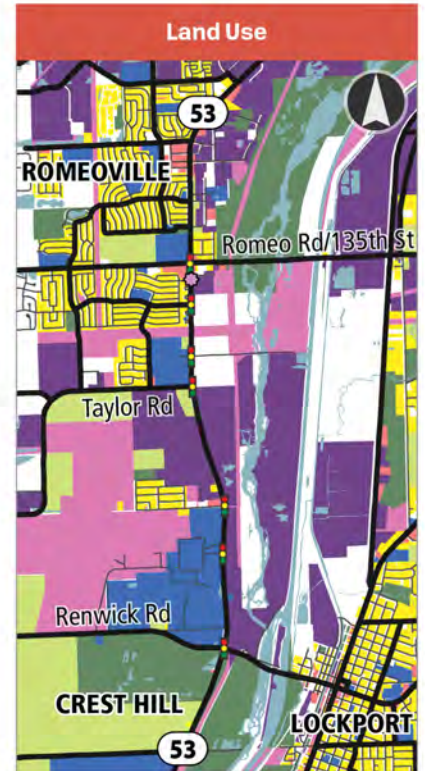
Existing Conditions



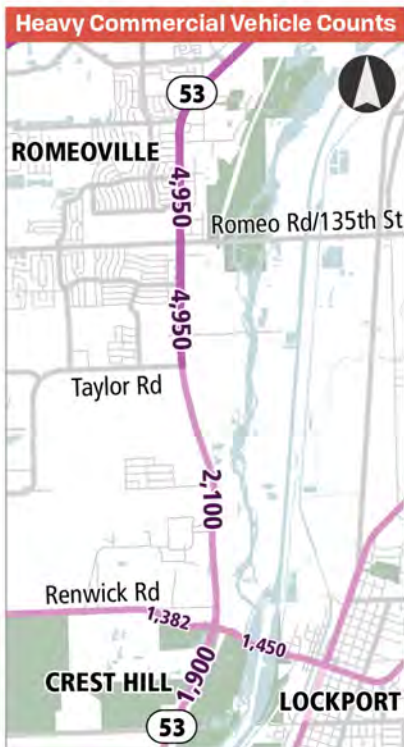
- | | |
|---|--|
| Pavement Condition | Truck Crashes |
| <ul style="list-style-type: none"> ■ Poor ■ Fair ■ Fine ■ Good — Existing Trail — Planned Trail | <ul style="list-style-type: none"> Fatality B Injury C Injury A Injury No Injury Poor Bridge Condition |



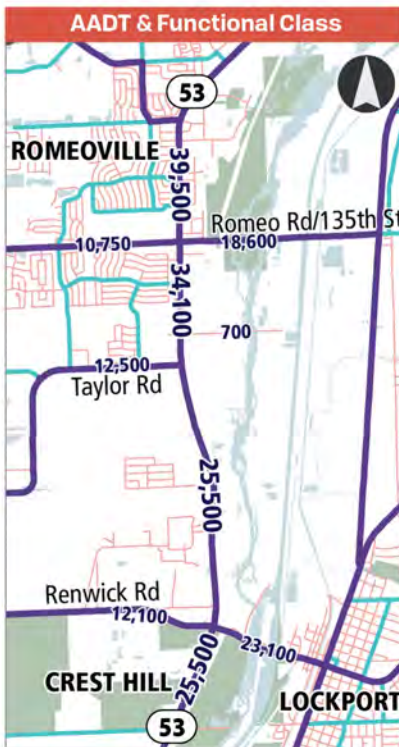
- | | |
|--|---|
| — IDOT | — Township or Road District |
| — County | — Private |
| | — Municipality |



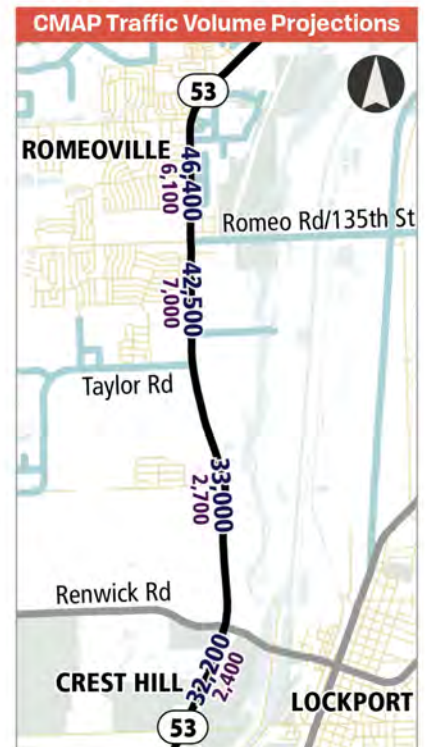
- | | |
|---|---|
| ■ Agriculture | ■ Open Space |
| ■ Residential | ■ Industrial |
| ■ Commercial | ■ Transportation/Utility/Communications/Waste |
| ■ Institutional | |



- | | |
|---|---|
| — < 25.0% | — 50.0% - 74.9% |
| — 25.0% - 49.9% | — > 75.0% |



- | | |
|--|---|
| — Highway | — Collector |
| — Arterial | — Local |



- | | | | | |
|--|---|--|---|---|
| — Existing Class I & II | — Short Term Class II | — Long Term Class II | — Trucks Not Preferred | ### CMAP 2050 Projected ADT |
| | | | | ### CMAP 2050 Projected Truck Volume |

IL 53 Intersection Improvements

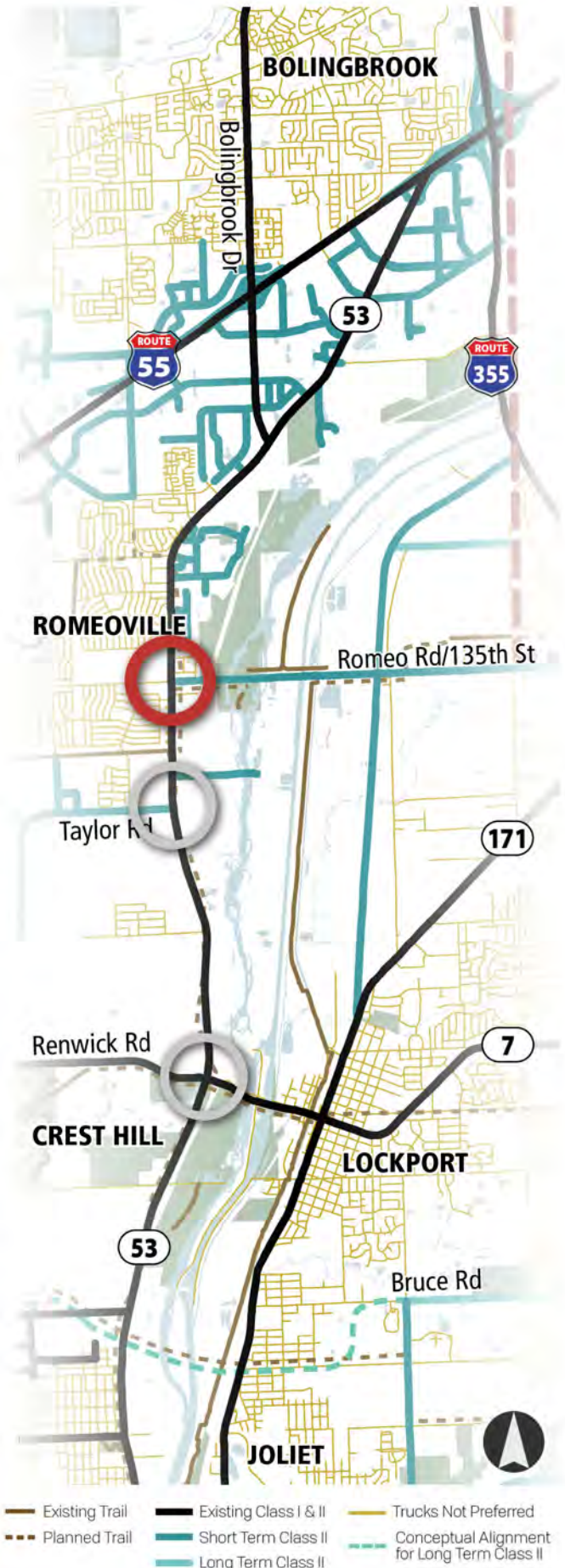
Northern Study Area | from Romeo Rd/135th St to Renwick Rd

The high traffic volumes along IL 53 could warrant a roadway expansion, including widening to three lanes in each direction. Additionally, from previous studies, there is a planned sidepath throughout the corridor that would connect to the regional trail network and key destinations. The planned sidepath and following intersection capacity and safety improvements should be installed in conjunction with a roadway expansion project. Volumes in the corridor range from about 25,000 AADT and jump to over 39,000 north of Romeo Rd. Truck volumes are consistent throughout corridor, including heavy commercial vehicle counts of 1,900 to 3,250 (which is consistent with the overall AADT). There are a mixture of land uses throughout the corridor as it is more built-up and less of a rural area. For example, school buses travel through these intersections. For this reason, it will be important to accommodate pedestrians and bicyclists in addition to vehicles in the roadway designs.

IL 53 & Romeo Rd / 135th St

This is a capacity-constrained intersection: There are huge traffic volumes shown at this location and not enough capacity to handle it. On IL 53, AADT is 34,000 to 40,000 at this location and Romeo Rd/135th St is 10,800 to 18,600. Heavy freight counts are nearly 5,000. Trucks are congested 10-17 hours a day and 50-75% of truck traffic is multi-unit. There are visible truck back-ups. There is also a mix of land uses near and around this location. To the east are warehouses; to the west is residential, commercial and institutional land uses; and to the north is a large Romeoville-Bolingbrook freight cluster. There is a new development at this intersection that has the sidewalk built away from the curb, likely in anticipation of future roadway widening. Recommendations for increasing the intersection capacity to safely and efficiently accommodate the heavy traffic include:

1. Conduct an intersection study to look at turning movements and determine where dual left turn lanes and right turn lanes are needed. If long term plans include improvements to IL 53, the intersection study should take place in conjunction with that effort.
2. Provide high visibility crosswalks at all legs to increase pedestrian safety.
3. There is a planned trail along IL 53 that would need to cross at this location. Provide safety crossing improvements for pedestrians and bicyclists, as shown in the Roadway and Intersection Improvement Toolkit.
4. Install right turn slip lanes and truck aprons at all legs, if right turn lanes are installed.



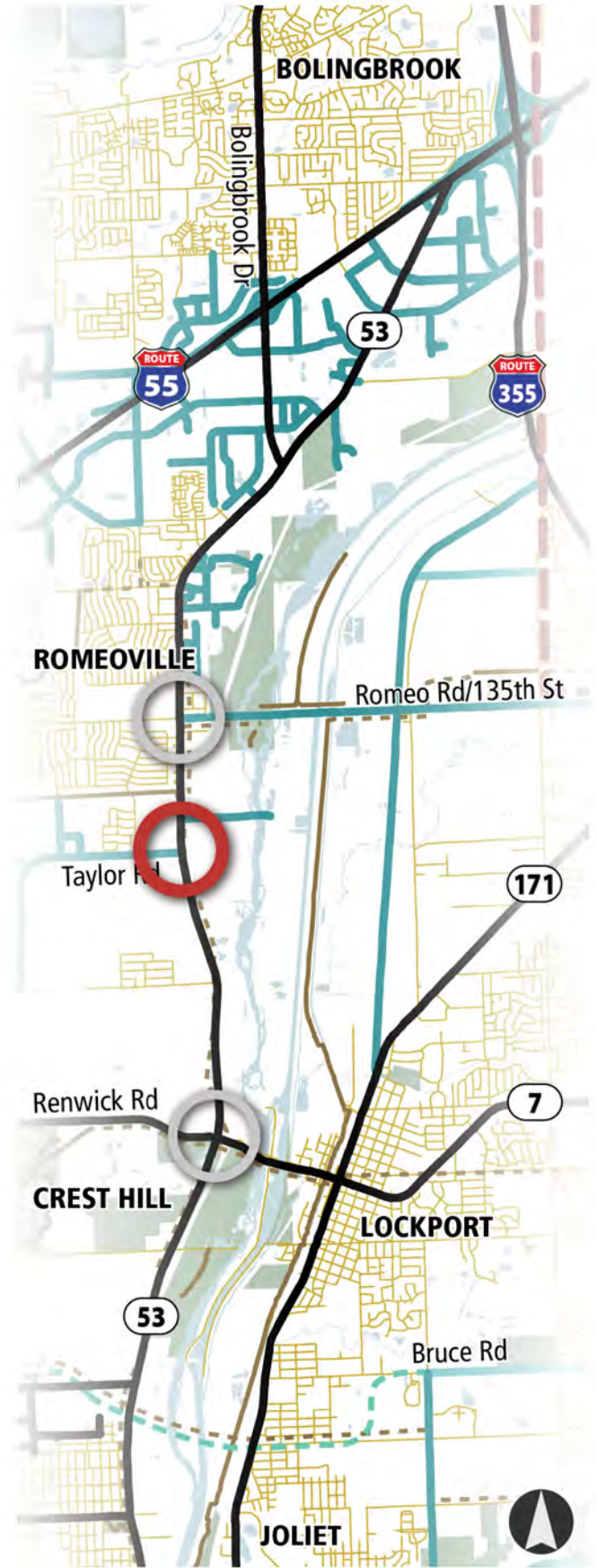
IL 53 Intersection Improvements

Northern Study Area | from Romeo Rd/135th St to Renwick Rd

IL 53 & Taylor Rd

This is a critical intersection that connects to both an industrial area as well as a high school. Heavy commercial vehicle counts are extremely high on IL 53 at this intersection: 2,100 to the south of Taylor Rd and 5,000 to the north. AADT is 34,000 on IL 53 and 12,500 on Taylor Rd at this location. On this segment there is 10-17 hours of truck congestion per day and 50-75% of truck traffic is multi-unit. Due to heavy truck movements, the following designs should be considered:

1. Lengthen the IL-53 southbound right turn lane to accommodate more trucks waiting to turn onto Taylor Rd.
2. Left turn lane at south leg of intersection: this may need to be dual left turn lanes to accommodate heavy movements.
3. Include pedestrian improvements: sidewalks, right-turn slip lanes, and high visibility crosswalks.
4. Improve street lighting.
5. Install right turn overlap traffic signalization on the eastbound approach.
6. There is a planned trail along IL 53 that would need to cross at this location. Provide safety crossing improvements for pedestrians and bicyclists, as shown in the Roadway and Intersection Improvement Toolkit.



- Existing Trail
- Planned Trail
- Existing Class I & II
- Short Term Class II
- Long Term Class II
- Trucks Not Preferred
- Conceptual Alignment for Long Term Class II

IL 53 Intersection Improvements

Northern Study Area | from Romeo Rd/135th St to Renwick Rd

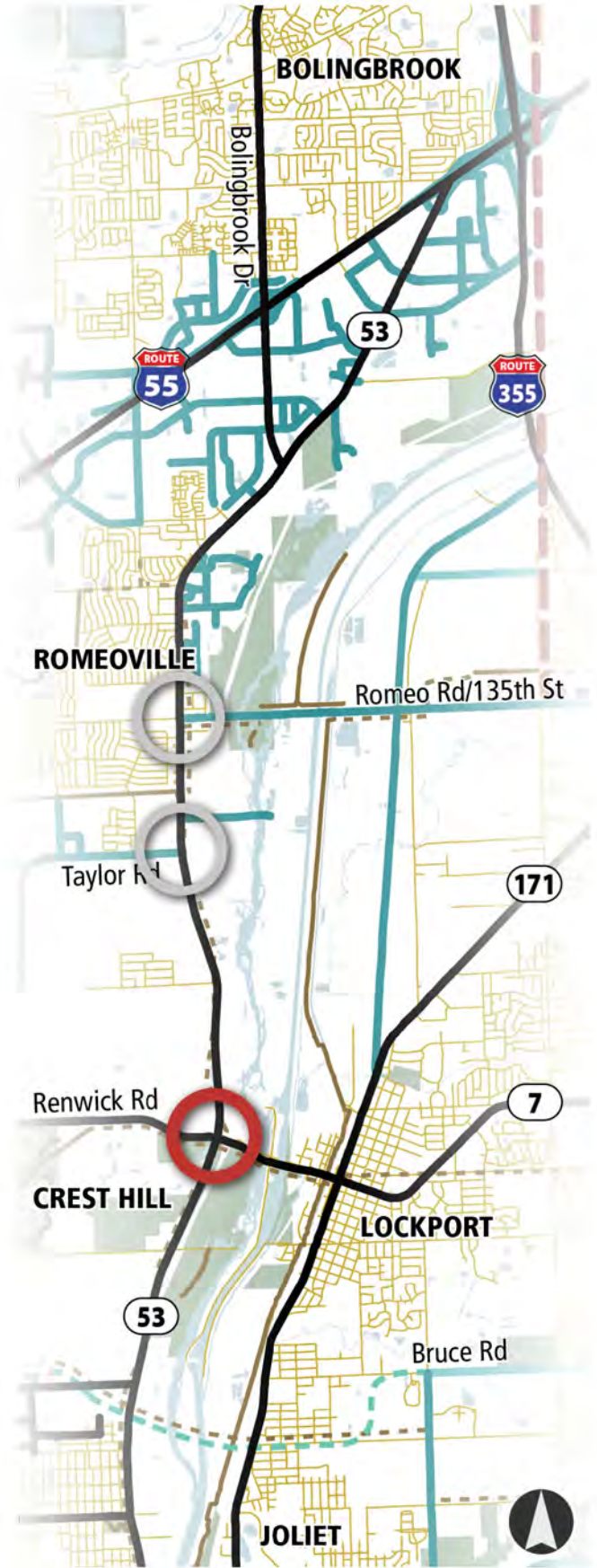
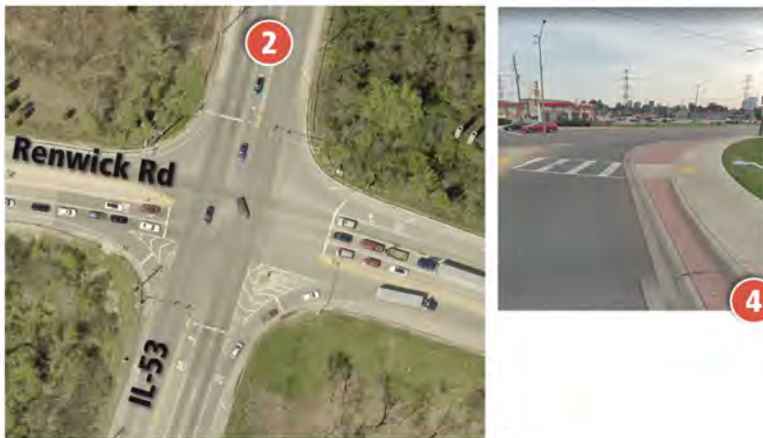
IL 53 & Renwick Rd/9th St

There are congestion issues heading towards and from Lockport's downtown at this location, especially on the east leg of the intersection: the right-turn lane (for traffic turning to head north) is short (~60' long) and constrained by the narrow bridge to the east over the tracks. If more than one truck is sitting in the right turn lane, other vehicles waiting to turn will block the through lane. Recommendations include:

1. Widen the bridge so that the right turn lane can be lengthened to improve overall intersection operations.
2. Consider if southbound dual left turn lanes are warranted.
3. There is a planned trail along IL 53 that would need to cross at this location. Provide safety crossing improvements for pedestrians and bicyclists, as shown in the Roadway and Intersection Improvement Toolkit.
4. Install truck aprons if crosswalk are installed to increase pedestrian safety while accommodating wide truck turn movements.

Bridge widening would not be an easy project, but could be warranted as:

- » There is about 25,500 AADT on IL 53 and 23,000 on 9th St as this location.
- » There is 6-8 hours of truck traffic congestion a day at the east leg of the intersection.
- » East-west heavy freight counts are 1,400 and north-south are 2,000.
- » There are 300 westbound vehicles per hour turning right during peak hours.
- » The bridge is listed as in poor condition.



Roadway and Intersection Improvement Toolkit

Truck Routes and Complete Street Designs

Right-Turn Slip Lane



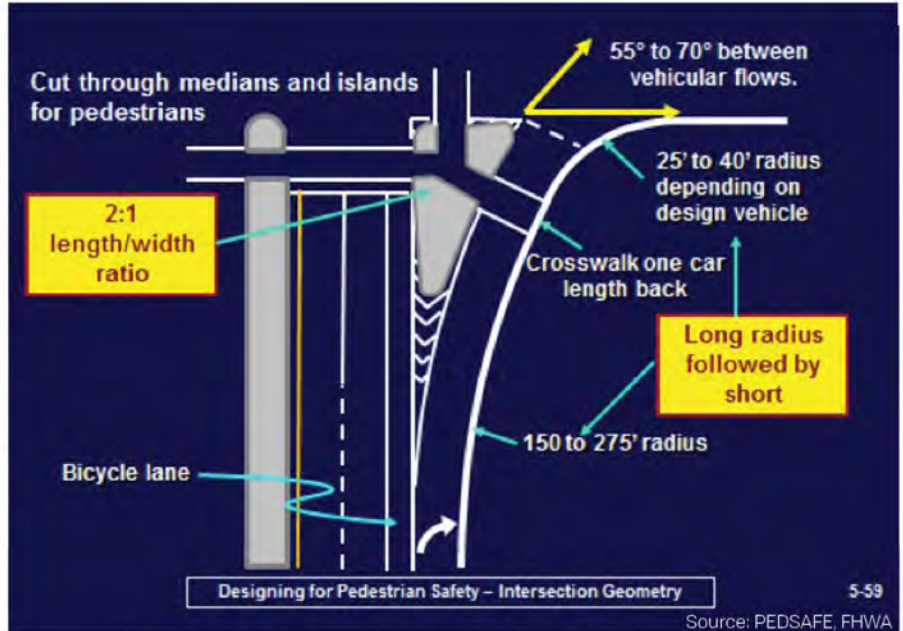
Source: Google Maps, 2018

Truck Apron Example



Source: Washington State DOT

Truck Apron in Use



Examples of Slip Lane and Corner Island Improvements

Passing Lane



Source: Arizona DOT

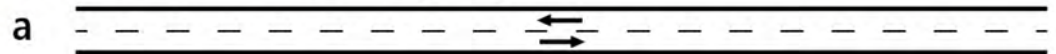
Passing Lane Example



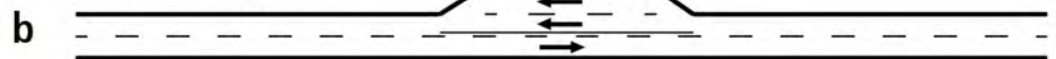
Source: Missouri DOT

Passing Lane Signage

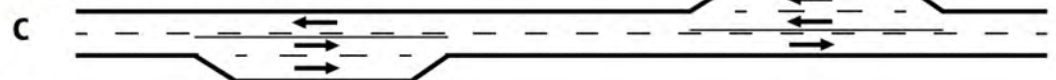
Conventional Two-Lane Highway



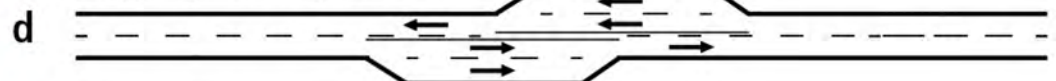
Isolated Passing Lane



Separated Passing Lane



Overlapping Passing Lane



Side-by-Side Passing Lane



Various Passing Lane Configurations

Roadway and Intersection Improvement Toolkit

Truck Routes and Complete Street Designs

Barrier Median



Concrete Median Barrier at Railroad Crossing



Mountable Raised Curb with Flexible Tubular Delineators

Pedestrian/Bicyclist Designs



Sidewalks



High Visibility Crosswalks



Sidepaths

Street Lighting



Improved Lighting

U.S. Route 52 Railroad Grade Separation Feasibility

I-80 to Doris Avenue | Technical Memorandum

This technical memorandum outlines the feasibility of a potential grade separation concept for U.S. Route 52 over the two railroad crossings south of Interstate 80 in the City of Joliet.

Existing Conditions

The study area is located within Will County in the City of Joliet. See Exhibit 1 for a Location Map. U.S. Route 52 is classified as an Other Principal Arterial and has been identified as a Strategic Regional Arterial (SRA) by the Illinois Department of Transportation. A SRA report for IL Route 53/U.S. Route 52 was completed for this section of roadway in 1998. The 2019 Average Daily Traffic is approximately 24,600 vehicles per day. The existing speed limit is 40 mph.

U.S. Route 52 immediately south of I-80 consists of two 12-foot travel lanes in each direction separated by a 16-foot mountable median. U.S. Route 52 crosses over Hickory Creek on a bridge structure and then narrows to two 10-foot lanes in each direction south of the intersection with Patterson Road. Curb and gutter is located at the outer edges of pavement with retaining walls immediately adjacent to the back of curb between Patterson Road and Doris Avenue. U.S. Route 52 descends below grade and passes underneath two railroad structures that carry the BNSF Railway and Union Pacific Railroad. The existing vertical clearance for both structures is 14'0". U.S. Route 52 returns back to grade at Doris Avenue.

Concept Improvements

The proposed concept was developed based on the previously mentioned SRA report as well design criteria included in the IDOT BDE Manual – Chapter 46 (Strategic Regional Arterials). Some of the design criteria used includes the following:

- Design speed = 45 mph
- Proposed 12-foot lane widths
- B-6.24 curb and gutter
- 18-foot raised median
- 23'-0" vertical clearance over railroad
- Maximum profile grade = 6%
- Approach gradients at cross streets = 1-2%

The first proposed concept (Alternative 1) was developed utilizing the existing alignment of U.S. Route 52. The proposed plan widens the existing pavement to two lanes in each direction separated by a barrier median. Two profile concepts were developed for this alignment. The first profile concept shown in blue mostly maintains the required flatter profile gradients at the three cross streets of Doris Avenue, Patterson Avenue, and the I-80 ramps but will likely require longer retaining walls and more fill material to build up the roadway bed. The second profile concept shown in red reduces the amount of fill material needed but does not meet the approach gradient criteria at the cross streets. This could make it more challenging for larger trucks to start up from a complete stop at a traffic signal and would also require approval of design exceptions by IDOT. The Alternative 1 plan and profile concepts are included on Exhibit 2.

By reconstructing U.S. Route 52 to go over the two railroad crossings the following impacts may be encountered:

- Close the driveway to the Eco Auto Recycler facility directly across from Doris Avenue. It may be possible to relocate their access further south.
- Reconstruct a portion of Doris Avenue to match existing grade. May require reconfiguration of existing parking spots along the south side of Doris Avenue adjacent to Nowell Park.
- Reconstruct a portion of Patterson Road to match existing grade. Access to a truck storage lot may need to be reconstructed or relocated.
- Existing roadway structure over Hickory Creek would need to be replaced to accommodate the elevation change on U.S. 52 over existing conditions.
- Reconstruct a portion of the I-80 interchange ramps to match in to existing grades. It should be noted that there is a proposed reconfiguration of the I-80/U.S. Route 52 interchange. A rendering of the proposed I-80 interchange reconfiguration plan is included as Exhibit 3.
- The proposed U.S. Route 52 roadway would be approximately 55-60 feet above the existing roadway between the two railroad crossings. This would require a substantial amount of fill material to be placed below the existing structures during construction with retaining walls likely needed to extend on both sides of U.S. Route 52 within the limits of the grade separation.
- Existing railroad structures could be considered historic elements.

U.S. Route 52 Railroad Grade Separation Feasibility

I-80 to Doris Avenue | Technical Memorandum

The second proposed concept was developed on a new alignment for U.S. Route 52 that would curve to the west south of Doris Avenue and then curve back east south of I-80 to tie back in to the existing alignment. This lengthened horizontal alignment will allow for flatter profile grades to get up and over the two railroad crossings. The Alternative 2 plan and profile concept is shown on Exhibit 3. The following impacts may be encountered with Alternative 2:

- Provide new structure to carry U.S. 52 over Sugar Run.
- Full acquisition of the Eco Auto Recycler facility.
- Cul-de-sac Doris Avenue at existing U.S. Route 52.
- Cul-de-sac Patterson Road at Joliet Street.
- Partial or full acquisition of truck storage lot on Patterson
- Provide new structure to carry U.S. 52 over Hickory Creek
- The proposed U.S. Route 52 roadway would be approximately 30 feet above the existing ground between the two railroad crossings. This would require a substantial amount of fill material to be placed during construction with retaining walls likely needed to extend on both sides of U.S. Route 52 within the limits of the grade separation. Additionally the existing roadway underpass would likely need to be filled in or repurposed as a future ped/bike underpass.

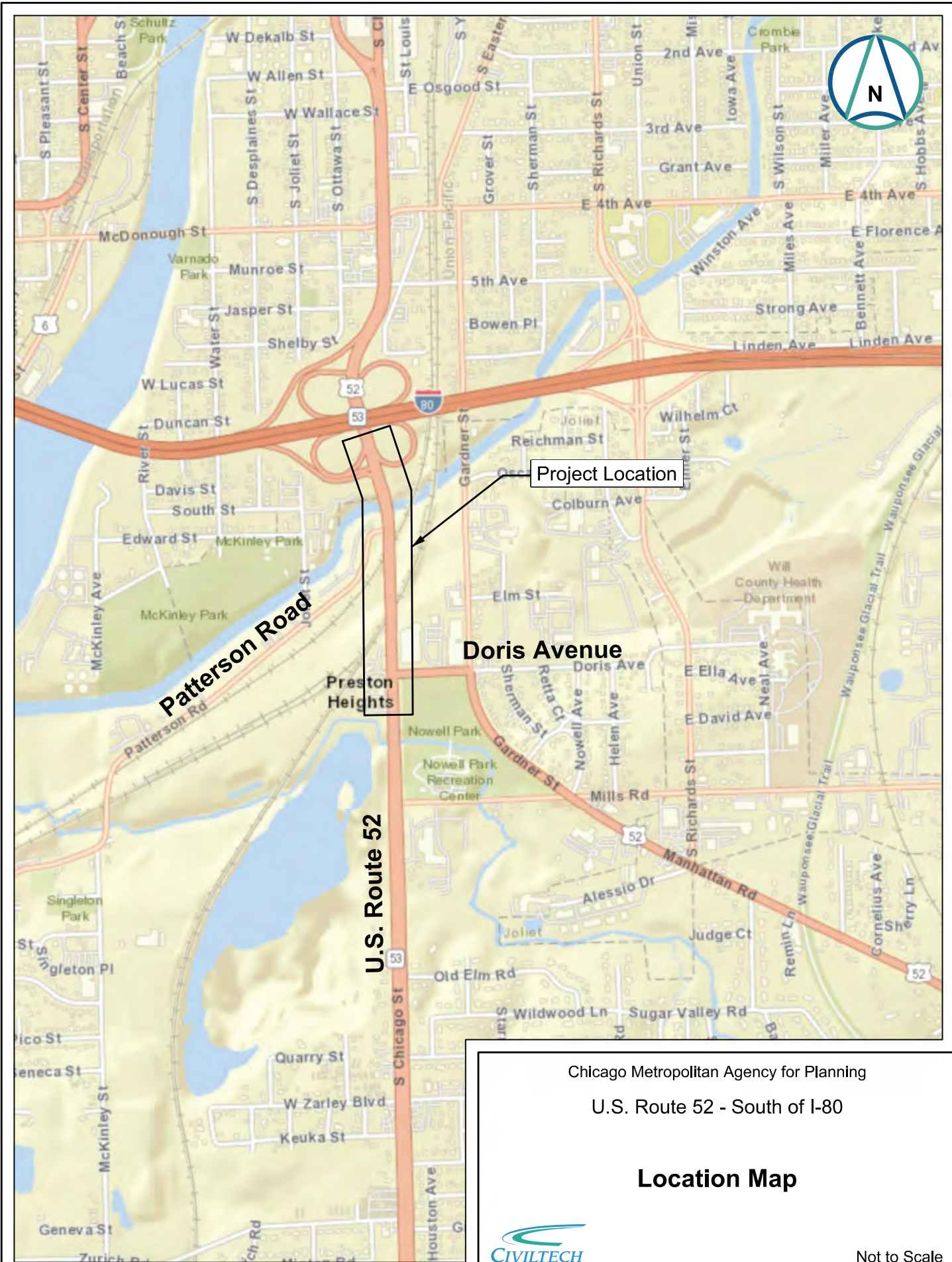
While specific investigations into pedestrian and/or bicycle accommodations were not completed as part of these concepts, there does not appear to be any existing facilities with the project limits or adjacent to it. The proposed roadway and structures could be designed to provide sufficient space for future pedestrian and bicycle accommodations.

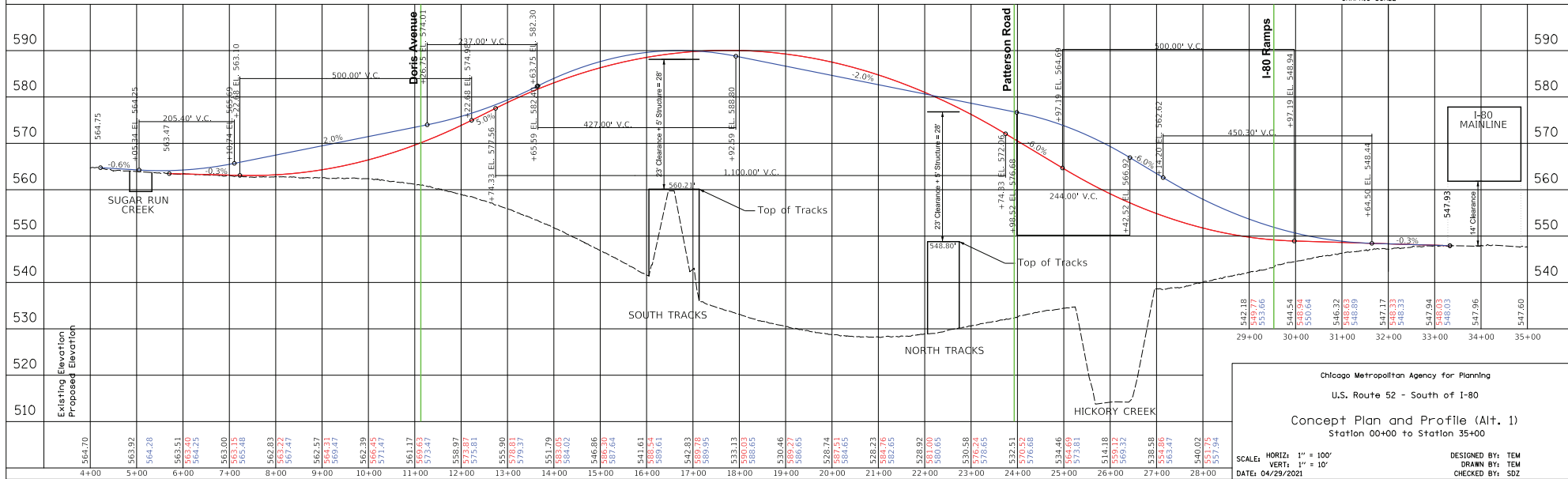
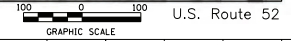
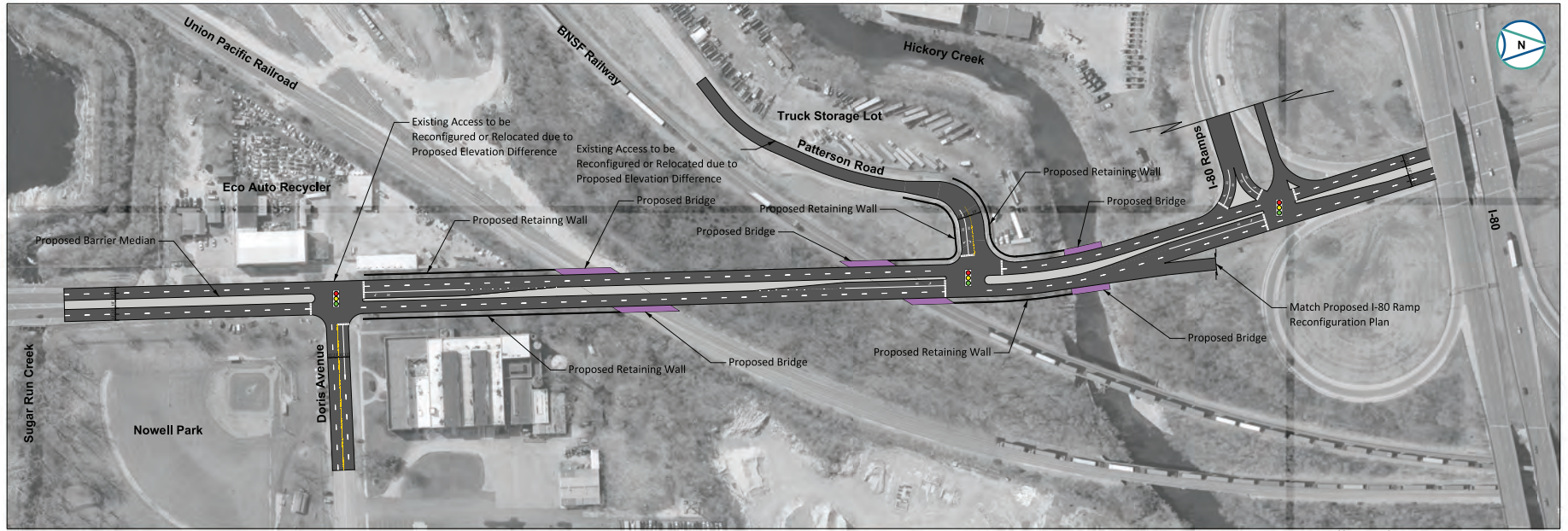
Conclusions

The proposed concepts of U.S. Route 52 going over the two railroad crossings south of I-80 are both feasible from a horizontal and vertical design perspective. However there are some challenges associated with the concepts as noted above. Ultimately a full feasibility study that would investigate all aspects of this concept design including constructability and cost should be performed. All feasible grade separation alternatives should be investigated in order to select the best option for this location.

Exhibits

Exhibit 1	Location Map
Exhibit 2	Alternative 1 - Concept Plan and Profile Improvement
Exhibit 3	Alternative 2 - Concept Plan and Profile Improvement
Exhibit 4	I-80 Concept Rendering (from i-80will.com)

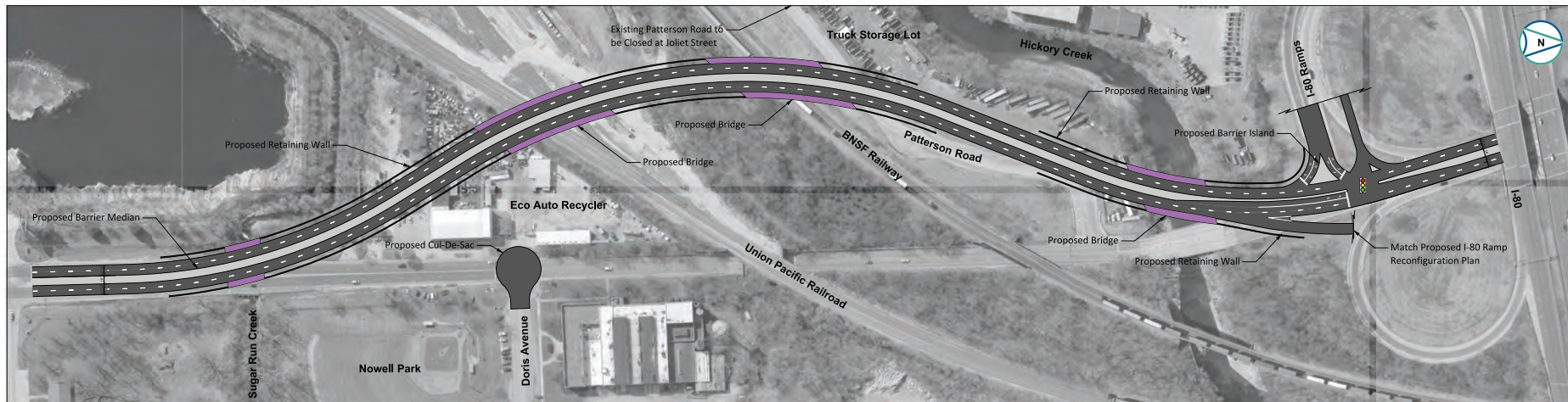




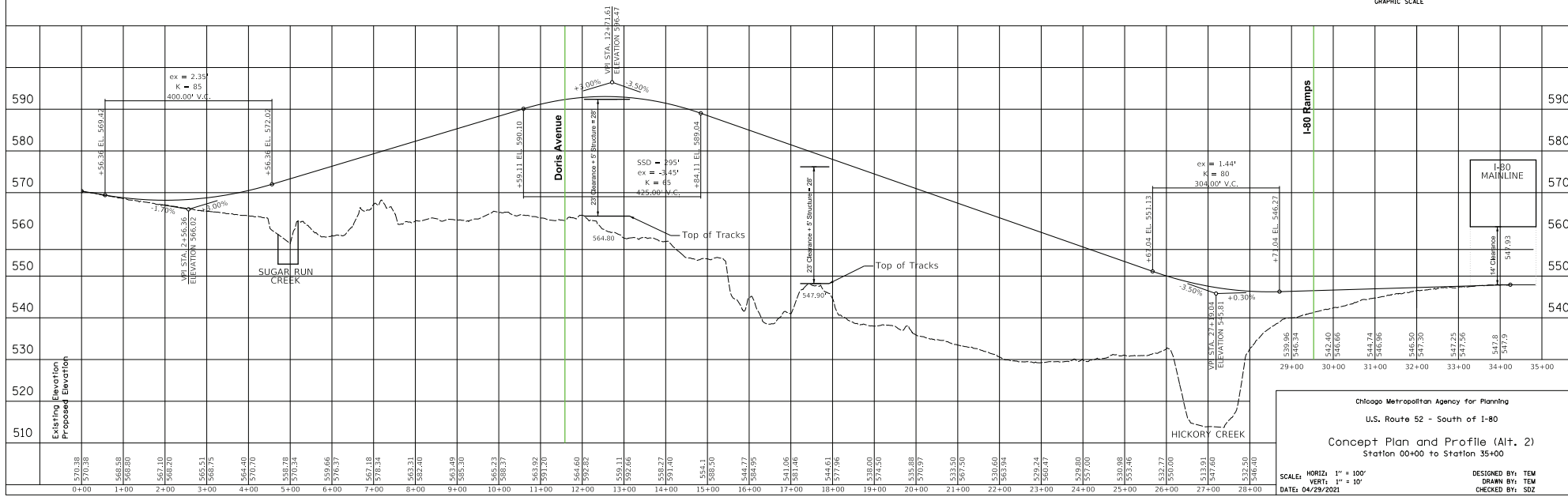
Chicago Metropolitan Agency for Planning
 U.S. Route 52 - South of I-80
 Concept Plan and Profile (Alt. 1)
 Station 00+00 to Station 35+00

SCALE: HORIZ. 1" = 100'
 VERT. 1" = 10'
 DATE: 04/29/2021

DESIGNED BY: TEM
 DRAWN BY: TEM
 CHECKED BY: SDZ



100 0 100 U.S. Route 52 GRAPHIC SCALE



Chicago Metropolitan Agency for Planning
 U.S. Route 52 - South of I-80
 Concept Plan and Profile (Alt. 2)
 Station 00+00 to Station 35+00
 SCALE: HORIZ: 1" = 100'
 VERT: 1" = 10'
 DATE: 04/29/2021
 DESIGNED BY: TEM
 DRAWN BY: TEM
 CHECKED BY: SDZ



I-80/Chicago Street and I-80/Center Street Proposed Interchanges with Realigned Des Plaines River Bridges (Looking South)

Appendix D

Appendix D. Moving Will County Engagement and Planning Process Overview and Timeline

This appendix provides an overview of the community engagement conducted, planning process timeline, and milestones completed (and in-progress), and expected deliverables for the Moving Will County project.

STEERING COMMITTEE

Throughout the project timeline the Steering Committee has played a critical role in getting the word out and sharing public involvement opportunities with their community members. They have been an important resource for this regional community engagement effort, as both the Land Use Strategy and Truck Routing study areas together span twenty municipalities and large swaths of unincorporated areas. The Steering Committee consists of leaders from local municipalities, agencies, as well as associations and nonprofits representing business, environmental and agricultural interests. They have reviewed draft deliverables at key milestones in the timeline and provided feedback that was incorporated into revisions. Steering Committee members include:

- Will County Land Use Department
- Will County DOT
- IDOT District 1
- Illinois Soybean Association
- Illinois Trucking Association
- Midewin National Tallgrass Prairie
- Mid-West Truckers
- Openlands
- Will County Board
- Will County Center for Economic Development
- Will County Governmental League
- Forest Preserve District of Will County
- Village of Elwood
- Village of Manhattan
- City of Joliet
- Village of Channahon
- Village of Frankfort
- Village of Symerton
- Village of Minooka
- Village of Mokena
- Village of New Lenox
- Village of Rockdale
- City of Crest Hill
- City of Lockport
- Village of Plainfield
- City of Naperville
- City of Wilmington
- Village of Bolingbrook
- Village of Shorewood
- Village of Woodridge
- Village of Homer Glen
- Village of Romeoville

ENGAGEMENT SUMMARY

Below is a summary of the community engagement events and opportunities that have been conducted since project kickoff as a part of Moving Will County. To see how they fit within the deliverables, please see the "Timeline: Completed" section in this memo.

- Project website: contact/comment form, plan documents, community meeting recordings, project updates and engagement opportunities.
 - o Website contact email list: 750+ participants
 - o Website comments received: 90+ comments
- 2 Virtual Public Workshops: 127 attended first, 118 attended second
- 4 Steering Committee meetings
- Online surveys:
 - o For community members/public:
 - Online interactive map of Draft Truck Route Network (WikiMap): over 300 comments
 - Online survey of Draft Land Use Strategy (Survey Monkey): 255 responses
 - o For Steering Committee:
 - Online survey of project themes/goals/outcomes (Survey Monkey)
 - Online survey of Land Use Strategy (Survey Monkey)
- Alternatives for those without internet access: poster-sized maps, printable surveys, and call-in voice mail number
- ~18 Focus groups/stakeholder interviews

TIMELINE: COMPLETED

Below is a timeline of the major milestones and deliverables completed to date throughout the Moving Will County planning process. Opportunities in which **key stakeholders and the public were engaged are shown below in bolded font**.

- Fall 2019: Project Kickoff
 - o **First Steering Committee:** December 2019
 - Meeting objectives: project overview, process, timeline, themes, goals and opportunities.
- Winter 2020: Existing Conditions Analysis
 - o **Focus Groups and Stakeholder Interviews** (14) conducted with municipalities and key organizations/agencies.
 - o Draft Existing Conditions Reports submitted for Land Use Strategy and Truck Routing Study.
- Spring 2020: Existing Conditions Analysis continues
 - o Existing Conditions Reports revised.
 - o **Second Steering Committee:** April 2020
 - Meeting objectives: overview of existing conditions analysis.
 - o Truck Routing Best Practices memo completed.
- Summer 2020: Draft Truck Route Network
 - o Draft Truck Route Network developed.
 - o **Municipal review:** individualized outreach to each study area municipality to review and recommend revisions to the draft truck routing recommendations before public release.
 - o Draft Truck Route Network revised based on municipal staff feedback.
 - o **First Virtual Community Workshop:** August 2020
 - Meeting objectives: overview of the Moving Will planning process, existing conditions, and gathered feedback on Draft Truck Routing Network.
 - 127 attendees.
 - o Other engagement opportunities:
 - **Online survey:** map of Draft Truck Route Network in which community members could place comments. Over 300 comments received.
 - **Printed poster maps** of Draft Truck Route Network were sent to key community locations.
 - o **Municipal poll:** poll sent to leaders of study area municipalities to weigh in on themes/goals and provide input on how their community intends to adopt/accept and implement the project.
- Fall 2020: Revised Truck Route Network and Draft Preservation Areas and Land Use Scenarios
 - o Draft Preservation Areas and Land Use Scenarios developed.
 - o **Land Use Scenarios informational meeting:** Q&A held for Steering Committee members to better understand the draft recommendations prior to taking an online survey and attending the Steering Committee meeting.
 - o **Third Steering Committee:** October 2020
 - Meeting objectives: gain feedback on Draft Truck Routing Network updates and Draft Preservation Areas and Land Use Scenarios.
 - o **Land Use Scenarios Online survey:** sent to Steering Committee on Draft Preservation Areas and Land Use Scenarios to provide further input.
- Winter 2021: Draft Land Use Strategy
 - o Draft Land Use Strategy developed based on Fall Steering Committee feedback.
 - o **Fourth Steering Committee meeting:** February 2021
 - Meeting objectives: gained feedback on revised preservation areas and criteria for locating future TDL/industrial land uses.
 - o **Second Virtual Community Workshop:** February 2021
 - Meeting objectives: gained feedback on revised preservation areas and criteria for locating future TDL/industrial land uses.
 - 118 attendees

- Spring 2021: Revised Draft Land Use Strategy and Finalize Truck Routing Study
 - o **Online survey:** gained feedback on Draft Land Use Strategy from community members. 255 respondents.

TIMELINE: NEXT STEPS

- Summer 2021: Revised Draft Land Use Strategy and Finalize Truck Routing Study continues
 - o Finalize Truck Routing Study: May 2021
 - o Develop Land Use Strategy Document: June 2021
 - o **Final Steering Committee Review Period** of Land Use Strategy document: July 2021
- Fall 2021: Final Land Use Strategy
 - o Land Use Strategy finalized: September 2021
 - o Moving Will County adoption: October 2021

FINAL DELIVERABLES

- Truck Routing Study
 - o Recommended truck routing network
 - o Recommended investment plan
 - o National best practices for accommodating trucks
 - o Guidance for local communities in designating truck routes
- Land Use Strategy
 - o Economic Market Analysis
 - o Preservation areas
 - o Land use scenarios
 - o Impact assessment
 - o Implementation guidance
- Between both studies:
 - o Design ideas to improve safety and mitigate the negative externalities of trucks
 - o Livability recommendations

Appendix E

Appendix E. National Best Practices for Accommodating Trucks

This appendix reviews best practices on how to mitigate negative externalities resulting from truck traffic, such as safety issues, emissions, increased noise and congestion. It begins with a brief overview of the Will County Community Friendly Freight Mobility Plan, published in 2017, which provides high-level guidance on considerations for local communities in mitigating the negative impacts of goods movement. The report continues with a review of seven national resources for freight accommodation strategies, and then closes with an analysis of which strategies are most applicable to Will County.

Best Practices from the Will County Community Friendly Freight Mobility Plan (2017)

The result of a multiyear planning effort, the Will County Community Friendly Freight Mobility Plan (“Freight Plan”) provides guidance for freight policies, programs, and investments to ensure future improvements support safe, livable communities and reduce conflicts between freight and other uses. This plan provides a detailed review of the freight sector in Will County, analyzing origins and destinations of freight flows, growth in industrial real estate, performance of the transportation system, and the freight workforce. It also prioritizes 25 capital improvements, many of which are of regional or national significance.

In addition to presenting existing conditions and a capital improvement plan, the Freight Plan offers guidance to local communities to balance freight-related economic development with quality of life. For example, Appendix I of the Freight Plan offers a summary of best practices as well as a checklist to assist communities in evaluating a proposed freight-related development. Some of these include whether a detailed traffic impact study has been prepared, if the development is consistent with the community’s land use plan, and if the plan has been evaluated from a comprehensive safety perspective.

An important step when trying to create efficient and sustainable communities is to coordinate and integrate land use planning with transportation planning. Planning for freight in a land use plan can improve the economic vitality, lower costs for transportation infrastructure and decrease congestion. Planned development areas should be freight supportive and industrially efficient. Such locations provide access to multiple modes of freight, create clustering opportunities for different type of facilities, have enough land to meet future demand and provides good access to the necessary workforce.

Intermodal facilities and large-scale freight uses should be analyzed on a regional level, taking into consideration impacts on regional routes and other projects. When developing and operating a site, having a proper site design is key to create freight developments compatible with the surrounding community. Successful integration involves:

- Providing adequate parking for all equipment and vehicle types;
- Planning for ancillary uses that support the freight use area;
- Using suitable design standards for buildings, landscaping, signage, and noise mitigation; and
- Designing with safety in mind, prioritizing projects that address locations with many truck crashes and designating truck routes to reduce conflicts in residential areas.

A series of environmental issues need to be addressed to prevent the degradation of natural areas. Some of the measures discussed were buffer zones around new or expanding freight developments and focusing on strong anti-idling regulations and technology through partnerships with the industry. It is also important to regularly review and update route designations and emergency management plans.

Several new freight technologies have potential application in Will County, such as truck platooning on Interstate corridors, managed lanes, autonomous trucks, and automated systems for warehouse operations. Freight yard automation is another relevant technology where at least some container handling is being done without human interaction, increasing efficiency within the yard and allowing for additional capacity

Review of National Best Practices

The following section briefly summarizes six national studies that survey best practices to improve freight mobility while protecting natural areas, communities and the quality of life of those living in them. The case studies originate from state- and nationally funded research programs like the National Cooperative Highway Research Program (NCHRP) and New York State Energy Research and Development Authority (NYSERDA), as well as from MPO's and global environmental partnerships. In addition to the six studies, a summary of the proposed Advanced Clean Trucks Regulation (ACT) in California is included. This example demonstrates a current approach to promote the adoption of zero-emissions trucks through regulatory action.

NCHRP Research Report 862 - Guide to Deploying Clean Truck Freight Strategies (2017)

NCHRP Research Report 862, "Guide to Deploying Clean Truck Freight Strategies", reviews clean truck strategies to reduce truck emissions. The report conducts a comprehensive literature review to identify strategies, includes the results of interviews with freight industry stakeholders, and describes the application of select strategies by public-sector agencies. The NCHRP project also included the development of a tool for selecting and applying strategies to encourage low-emission and fuel-efficient truck movements.

Following a literature review of more than 50 documents, the report summarizes clean truck strategies into four categories:

- **Engine and aftertreatment technologies:** Diesel Oxidation Catalysts (DOC) and Diesel Particulate Filters (DPF), both aftertreatment devices reducing particulate matter (PM) from exhaust gases. While having no effect on the amount of greenhouse gases (GHGs) and nitrous oxides (NOx), they reduce PMs by 20 to 95 percent, with DPFs being most effective. Both the technologies are widely available and applicable on trucks older than model year (MY) 2007. DOCs cost between \$600-\$4,000 per truck, while DPFs sell for \$8,000-\$20,000.
- **Engine and powertrain technologies:** Hybrid Electric Vehicle (HEV), Plug-in Hybrid Electric Vehicle (PHEV), and Battery-electric vehicles (BEV). HEVs are most common today and cost 30 to 50 percent more than conventional vehicles and can reduce GHGs, PM and NOx emissions by 10 to 20 percent. In contrast, PHEV and BEV technologies are still new with limited availability. They can reduce fuel consumption and emissions by 30 to 100 percent, but currently cost two to three times more than a conventional vehicle.
- **Vehicle Technologies:** Trailer side skirts, roof fairings³⁹, low rolling resistance tires, and idle-reducing technologies. These strategies are all widely available and commonly used. Equipment to improve aerodynamics is a relatively cheap technology and can improve fuel

³⁹ Roof fairings = parts that improve the aerodynamics of the truck, reducing drag and increasing fuel efficiency

economy by up to 12 percent. Idle-reduction strategies like auto start/stop systems and fuel operated heaters are more expensive but generally have greater impacts on fuel and emissions.

- Operational Strategies: Engine governors, routing software, loading and packing techniques, truck-stop electrification, gate appointment systems, off-peak incentives, and virtual container yards. Some technologies, such as engine governors, are relatively inexpensive (\$1,000-1,500 per vehicle), while routing software can cost up to \$10,000 per truck. Truck-stop electrification that allows drivers to plug in their vehicles at truck stops can have significant effects on fuel consumption and emissions, but this approach has limited availability and higher costs.

NCHRP 862 included interviews with the private sector to provide perspective on how these strategies are implemented in practice. The interviews with motor carriers revealed that firms face barriers when adopting technologies that reduce fuel consumption and emissions. New technology is expensive and rapidly evolving. This reduces the value of the current fleet, making resale and financing more difficult. In addition, companies agree that changing driver behavior improves fuel efficiency more than vehicle design and new technology. Other main takeaways from the motor carriers included:

- Powertrain technologies are not developed enough to be commonly used, with operators doubting the capacity of current hybrid and electric truck and their ability to recoup the cost, added weight, and more extensive maintenance associated with such technologies;
- Higher vehicle costs and inadequate fueling infrastructure help explain the limited adoption of natural gas trucks by carriers; and
- Carriers prefer a balance of private-sector responsibility and limited government intervention in the form of grants, tax incentives, and expansion of infrastructure when implementing new technologies.

The report then profiles case studies of truck emissions strategies implemented by public-sector side agencies. The Port Authority of New York and New Jersey (PANYNJ) and Port of Long Beach (POLB), both large landlord agencies, were able to impose regulations restricting access to drayage⁴⁰ trucks based on the year of engine model. Older models were progressively banned until only trucks newer than MY 2007 were allowed to access the port. The restrictions imposed by POLB were also supported by the statewide drayage truck regulations; California Air Resources Board (CARB—described below). Such regulations can result in significant emissions reductions in areas with a large number of diesel engines, but have faced legal challenges.

Many agencies offer grants or rebates to truck operators to purchase newer, cleaner vehicles while others pay the owner to scrap old vehicles. Of increasing popularity are voucher programs, such as those run by the City of Chicago and other agencies. “Drive Clean Chicago” allows any public, private

⁴⁰ Trucks transporting goods over short distance, often from a port to destinations within the same urban area

or non-profit fleets operating at least 75 percent of the time in the 6-county Chicago area for a point-of-sale discount on class 2 to 8 vehicles⁴¹. When a new vehicle is purchased, the agency or organization reimburses the dealer, reducing administrative efforts and costs otherwise associated with interacting with the large number of operators.

Based on the experience of a variety of public agencies, several lessons learned were brought forward:

- Research and pilot programs require extensive resources;
- Monitoring, maintaining and enforcing rebate programs is challenging, especially since they often require drivers to operate within a specific geographic area for a certain amount of time;
- It is essential to coordinate with dealers and vendors when implementing incentive programs; and
- Regulatory programs can have a significant impact on emissions, but often face resistance from industry, including lawsuits, in their early stages.

After synthesizing these findings, researchers developed a guide and tool used to assess truck emissions, estimate costs of clean truck programs and compare different strategies. Within the tool, a variety of choices including analysis type, area of interest, capital and fuel costs, type of modification, and annual mileage accumulation can be altered depending on the scenario. The tool was used in five case studies to demonstrate the functionality and how to interpret its results.

California Air Resources Board, Proposed Advanced Clean Trucks Regulation (2019)

The California Air Resources Board (CARB) is an agency under the California Environmental Protection Agency dedicated to setting the state's air quality standards and leading efforts to reduce emissions⁴². CARB plays a key role in meeting the state's goal to reduce greenhouse gas emissions (GHG) 40 percent by 2030 and 80 percent by 2050, as well as the goal to reduce petroleum use 50 percent by 2030. Given that the transportation sector accounts for approximately 40 percent of emissions in California, CARB is currently investigating ways to expand the use of electric, hybrid and alternative-fuel vehicles⁴³. Doing so will also assist the state in meeting its target of 5 million zero-emissions vehicles (ZEV) on the road by 2030⁴⁴.

To promote the adoption of zero-emission trucks, CARB proposed the Advanced Clean Trucks (ACT) regulation in 2019⁴⁵. It is part of a comprehensive approach to stimulate a large-scale transition of trucks in the state to zero emissions medium- and heavy-duty vehicles (i.e., Class 2B-Class 8 vehicles). The proposed regulation was first identified in 2016 as a strategy included in the

⁴¹ <http://www.drivecleanchicago.com/About/OurPrograms.aspx>

⁴² <https://ww2.arb.ca.gov/about>

⁴³ <https://ww2.arb.ca.gov/sites/default/files/2019-07/190521factsheet.pdf>

⁴⁴ California Executive orders B-16-12 and B-48-18 calls for 1.5 million ZEVs in California by 2025 and 5 million ZEVs by 2030. <https://ww3.arb.ca.gov/regact/2019/act2019/notice.pdf> pg. 3

⁴⁵ <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-trucks>

State Implementation Plan and 2017 Climate Change Scoping Plan, mainly focusing on first- and last-mile applications⁴⁶. CARB issued revisions to the proposed regulation on April 28, 2020 and is expected to approve the revisions by late June 2020⁴⁷.

The proposed regulation is divided into two main components:

- **Zero-Emission Truck Sales:** The sales requirement applies to any manufacturer selling more than 500 Class 2b-8 vehicles in California each year⁴⁸. The proposal would require such manufacturers to sell ZE vehicles as an increasing share of California sales beginning in 2024⁴⁹:
 - Sales of Class 2b-3 vehicles (i.e., mainly full-size pickup trucks and vans) would begin at five percent of California sales in Model Year (MY) 2024 and increase to 55 percent in MY 2035 and beyond⁵⁰.
 - Sales of Class 7-8 tractor vehicles (i.e., semi-trucks that haul trailers) would begin at five percent for MY 2024 and increase to 40 percent by MY 2035.
 - All other trucks (Class 4-8 group) would begin at nine percent in MY 2024 and increase to 75 percent for 2035 and beyond.

The proposal includes a credit system to encourage manufacturers to accelerate the delivery of ZEVs while providing flexibility for them to reach compliance most effectively. Credits can be earned for each ZEV sold above and beyond the regulated minimum, and can be banked for later use, sold, or traded among manufacturers⁵¹.

- **Company and Fleet Reporting:** Large entities⁵² that operate in California would face a one-time reporting requirement in 2021. Such entities would have to report information about their contracting practices with motor carriers and for services that require using trucks or shuttles. Fleet owners with 100 or more trucks would need to report information about their fleets, such as where vehicles are assigned, dispatched, and how they are operated. The information would help to identify strategies that ensure fleets buy ZE trucks and use them where it is suitable for their needs.

Regulations such as the proposed Advanced Clean Trucks program are meant to spur technological advancement and market adoption. For manufacturers, the new research, manufacturing, development and certification processes will increase costs, but the required ZEV sales will count towards compliance with the other Federal and state regulations. For consumers, while ZEVs have higher upfront costs, those costs are expected to become more favorable as technology improves

⁴⁶ <https://ww3.arb.ca.gov/regact/2019/act2019/isor.pdf>

⁴⁷ <https://www.natlawreview.com/article/heavy-duty-truck-and-engine-regulation-us-epa-and-carb-agency-rulemaking-covid-19>

⁴⁸ <https://ww3.arb.ca.gov/regact/2019/act2019/isor.pdf>

⁴⁹ <https://ww3.arb.ca.gov/regact/2019/act2019/30dayattb.pdf>

⁵⁰ Class 2b-3 vehicles were initially excluded from sales requirements until 2027 but are, in part due to positive feasibility announcements from several manufacturers of ZE pickup trucks, now included in the proposed requirements for MY 2024.

⁵¹ Manufacturers receives one credit per ZE vehicle. Credits not needed for compliance with regulations can be banked for later use, sold or traded to other manufacturers. <https://ww2.arb.ca.gov/sites/default/files/2019-03/190402actpres.pdf>

⁵² Large entities are defined using five criteria found on <https://ww3.arb.ca.gov/regact/2019/act2019/isor.pdf> pg. III-10

and battery prices fall. Further, ZEVs have lower operating costs than diesel powered trucks, and the range of ZEVs will improve as technology advances over time. Statewide incentives in California, such as those offered through the Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP)⁵³, are available to offset some of the upfront vehicle capital costs by a point-of-sale rebate.

According to CARB, zero-emissions trucks are well suited to operate in urban areas, where stop-and-go driving is most prevalent and conventional engines are the least efficient. Smaller trucks, such as local delivery trucks, typically operate fewer than 100 miles per day and could be replaced by ZEV models that currently exceed that range. Similarly, drayage operations occur over relatively short distances. As a result, the proposed ACT regulation could play a key role in meeting goals for 100 percent of pick-ups and deliveries at the Ports of Long Beach and the Port of Los Angeles to be made by ZEVs by 2035 and 2040, respectively⁵⁴.

The proposed regulation would, according to CARB, assist in reaching air quality standards, improving the health of California residents, and meeting climate change goals⁵⁵. Most of the benefits would occur in the most populated areas of the state. The proposed ACT regulation is expected to significantly reduce GHG, nitrous oxide (NO_x), and fine particulate matter (PM_{2.5}) emissions. Aside from environmental impacts, the proposed ACT regulation is expected to result in statewide cost savings worth \$4.9 billion from 2020 to 2040, largely due to fuel cost savings. Estimated statewide health benefits are estimated to save an additional \$5.7 billion.

NCHRP Research Report 844 - Guide for Integrating Goods and Services Movement by Commercial Vehicles in Smart Growth Environments (2016)

NCHRP Research Report 844 provides a guide on how to effectively integrate freight movements in smart growth communities. As more areas are designed for mixed use, addressing the needs for those delivering goods is often overlooked but needs to be addressed for commerce and sustainability principles to exist side by side.

The research reviews strategies for regional land use, site-specific design, day-to-day operations and ongoing monitoring/engagement of private sector. Each subsection presents information about tradeoffs and considerations, the implementing stakeholder/entity and real-world examples.

When integrating freight in smart growth communities, compatible land uses must be identified while also buffering those land uses that are incompatible. A variety of strategies helping to “Set the stage” were identified, including:

- Define the goals of your community – identify valuable freight assets;
- Design development that is compatible with freight;
- Encourage urban logistics centers and “freight villages”;

⁵³ CARB together with CALSTART launched HVIP in 2009 to spur purchases of cleaner and more efficient trucks and buses in California

⁵⁴ <https://ww3.arb.ca.gov/regact/2019/act2019/isor.pdf>

⁵⁵ <https://ww3.arb.ca.gov/regact/2019/act2019/notice.pdf>

- Reuse brownfields for freight centers; and
- Promote cargo-oriented development in proximity to rail hubs.

When developing a site plan, several other issues must be addressed to successfully create public places while accommodating freight activity. Municipalities can use numerous strategies to do this, including:

- Consider off-street loading facilities in new buildings;
- Designate curbside loading zones to prevent conflicts with streets or sidewalks;
- Use lot depth and setback requirements to create buffers between freight activities and other uses; and
- Adopt design requirements for container and equipment storage to prevent them from interfering with other land uses.

Once the fundamentals of integrating freight in smart growth communities are in place, additional strategies are necessary to ensure successful operation. Those strategies include:

- Encourage off-peak delivery and extend the hours of operation at the freight terminals to avoid rush hour traffic;
- Reduce diesel engine emissions from delivery vehicles; and
- Establish recognition and certification programs for green fleets.

With all prior elements in place, there is still a need for ongoing monitoring to make sure freight practices keep up with national or global standards. Potential strategies include:

- Host community workshops to bring stakeholders together;
- Provide technical assistance to help local planners with freight integration and smart growth; and
- Work with private companies to pilot-test freight delivery solutions.

A series of six communities were evaluated as case studies, with each case representing one of six smart growth classifications. The most valuable lesson learned across the case studies was the importance of a shared vision between land use and design agencies, developers, residents and the business community. By maintaining fruitful relationships between these groups, changing needs in the community can be addressed through unconventional design features.

Freight Emissions Reduction Action Plan – Plan Bay Area 2040 Final Supplemental Report (2017)

The Metropolitan Transportation Commission (MTC), the metropolitan planning organization in the San Francisco Bay Area, developed a freight emission reduction action plan as part of a larger update of the Bay Area long-range transportation plan. The Bay Area has a goal of reducing per-

capita carbon dioxide emissions from passenger vehicles and light trucks by 7 percent by 2020 and by 15 percent by 2035.

The action plan reviews several truck freight emissions reduction strategies to encourage the adoption of zero and near-zero emissions technology. In general, an adequate market demand or programs that stimulate market demand are crucial to interest manufacturers to develop and implement zero- and near zero- emissions technologies. Other strategies were identified as having “potential for regional government involvement or leadership”, including:

- Conduct programs for technology demonstrations. When new train and truck technologies enter their early stages of commercial deployment, public agencies can help fund and administer demonstration programs. These programs benefit both the users, who are given an opportunity to test the new technology, and the manufacturers, as they can revise their products before commercial launch.
- Establish a sustainable freight advisory committee. Such a committee would work to align and implement recommendations from multiple plans, as well as review progress on already implemented projects.
- Define requirements for zero emissions operation. Zero emissions zones, capabilities, and compliance requirements must be clearly defined so manufacturers can develop and commercialize their products.
- Support regulatory action programs and implement incentive or purchase programs. Combining incentive and regulation programs is considered to be the best method to promote development and adoption of cleaner technology. Early adopters influence the market by making the new technologies visible to other users.
- Support the development of electric vehicle charging infrastructure. Significant work is needed to plan and evaluate infrastructure requirements for heavy duty, zero-emission vehicles. Regional partners are important when bringing together fuel suppliers and infrastructure owners.
- Creating a “Center of Excellence”. A center of excellence is a possible framework to consider when shaping a strong regional program for low emission trucks. The center of excellence is a virtual or physical place where new technologies and applications for reduced emission trucks are showcased to encourage private and public buy-in, potentially expanding zero- and near zero- emission programs. If done successfully, government entities are given the opportunity to regularly interact with truck operators and technology developers, potentially stimulating zero- and near zero emissions technologies.

The report also identifies applications for zero and near-zero emission technology, both for truck and freight rail networks, at the local level. First, promising technologies were screened against freight applications in the Bay Area to determine where the technology could best be applied within a specific context. Based on the screening, the technologies were grouped into combinations that were evaluated for demonstration potential. Two demonstration projects, a “Yard Switcher Using Dual Mode Battery-Assisted Locomotive” and a “Range-Extended Vehicle (REEV) with Engine for

Medium Heavy Duty (Class 5-6) Trucks” were analyzed in more detail, discussing feasibility and steps for implementation.

Complete Streets Considerations for Freight and Emergency Vehicle Operations (2018)

The New York State Energy Research and Development Authority (NYSERDA) Project 83178 discusses design and management strategies for freight and emergency vehicles in complete streets environments. Despite the importance of such vehicles, they are often overlooked when designing for dense and highly populated areas. General access restrictions such as size and weight regulations, route restrictions, and noise regulations may have unintended traffic impacts, increasing truck travel distance and concentrating activity during peak traffic. They can also impact the local economy due to increased cost of goods, reduced market accessibility, and cause a disproportionate burden on independent operators due to limited flexibility and often-small profit margins.

Complete street environments present challenges for freight operators. Driving through roundabouts and turning onto narrow, pedestrian-friendly streets can cause difficulty for freight vehicles. Trucks are a safety risk to other users of the shared space due to their size, weight and large vehicle operator blind spots. Mixed-use streets often limit curbside and on-street parking by implementing dedicated infrastructure for buses, bikes, or pedestrians.

The guide offers the following strategies to address these operational concerns for trucks.

- By providing curbside parking and bicycle lanes, the turning radius can be increased allowing for wider turning paths;
- Asymmetrical median noses can accommodate large vehicle turns while maintaining total separation of trucks and pedestrians, maximizing safety;
- Recessed stop lines, where the stop line is pulled back from the intersection, can provide more turning space for large vehicles;
- Painted curb extensions can be used to discourage passenger car use in the active travel lanes, giving larger vehicles more space to operate;
- Bike boxes and two-phase turn queue boxes give more space for cyclists at intersections in front of other vehicles, providing a visual reminder and preventing right-turn conflicts with vehicles. These “right-hook” conflicts are especially dangerous when involving trucks, since cyclists stand the risk of being drawn under the wheels;
- Install convex safety mirrors in locations where large vehicles are expected to operate at low speeds;
- Dedicate on-street space for freight loading and unloading;
- Offset bike or bus lanes to provide more space for parked vehicles;
- Provide sidewalk cutouts or mountable sidewalks to allow for freight vehicles to park in designated areas of a sidewalk; and

- Explore flexible curb regulations to provide commercial loading space during certain hours of the day, for example during non-peak daytime or at night.

In addition to the above design guidelines and recommendations, the report also discusses demand management strategies to help manage freight movements in complete streets environments.

These include off-hours deliveries, urban consolidation centers, and lockers and pickup points:

- Shifting deliveries to non-peak hours can reduce travel time delays, congestion impacts, and the demand for shared curb space. However, off-hours deliveries might increase labor costs for operators and generate delivery noise at night.
- An urban consolidation center is a logistics facility where freight is transferred from large vehicles to smaller vehicles. As a result, these centers can reduce heavy vehicle travel and the demand for truck parking. Operators may save on expensive last mile costs but could instead face increased costs for transferring shipments across modes or vehicles.
- Lockers and pickup points can help avoid failed deliveries and provide a secure location to leave packages. Pickup points and lockers reduce the amount of delivery trips but may cause safety concerns for those picking up their deliveries.

NCFRP Report 33 - Improving Freight System Performance in Metropolitan Areas: A Planning Guide (2015)

NCFRP Report 33 provides strategies for both public and private stakeholders to help improve freight movement in metropolitan areas. Based on an analysis of public-sector initiatives, the report identifies eight categories of strategies, over 50 initiatives from around the world were discussed.

The categories include the following:

- Infrastructure management. Infrastructure improvements are often necessary to improve freight mobility since truck sizes and traffic have increased over the past decades. Initiatives such as ring roads, freight villages, and acceleration lanes were all reviewed.
- Parking/loading areas management. Parking spaces in many urban areas are limited, leading to double-parking and trucks circling a block to find a place to park. On-street and off-street parking and loading initiatives such as peak-hour clearways, freight zones, and timesharing of parking spaces can help alleviate freight issues due to large traffic volumes.
- Vehicle-related strategies. New technology and modern practices can reduce negative externalities caused by freight vehicles. Emission standards and low-noise delivery regulations are potential ways to help alleviating the environmental impacts. However, such programs cause operators to update their vehicle fleets, increasing investment and operating costs.
- Traffic management. By limiting, granting, or denying access for freight vehicles to travel certain places and routes, congestion and emissions may decrease. Truck routes, size and weight restrictions, low emission zones, and time-of-day delivery bans are examples of such management strategies. These regulations are often not well received by operators since they may increase costs.

- Pricing, incentives, and taxation. Monetary signaling can incentivize new technologies and sustainable practices, especially when implemented in concert with appropriate regulations.
- Logistical management. Strategies such as urban consolidation centers can reduce freight traffic in targeted areas, decreasing GHG emissions and improving safety. Freight efficiency and reliability can be improved with intelligent transportation systems (ITS) like dynamic routing and real-time information systems. Last-mile delivery practices, including driver training programs, anti-idling programs, and time-slotting of pick-ups and deliveries are also important efforts to improve freight system performance.
- Freight demand and land use management. By modifying the underlying demand for freight activity and spatial distribution of freight flows, some of the negative externalities from truck traffic can be addressed. This category includes both demand management strategies (e.g., mode shift programs, off-hour deliveries) and changes in land use policy (e.g., integrating freight into the land use planning process and relocating large traffic generators) to reduce truck travel.
- Stakeholder engagement. The understanding of freight issues among the public sector and agency leadership, as well as communications with the private sector, must be improved. Several strategies are presented, including the creation of freight advisory and technical advisory committees and educating elected officials about freight.

Nine case studies discuss some of the strategies and their implementation in six U.S. metropolitan areas. In addition, a Freight Trip Generation (FTG) software is introduced and evaluation matrices for public sector initiatives are provided.

INVEST – Sustainable Highways Self-Evaluation Tool (PD-13)

The Infrastructure Voluntary Evaluation Sustainability Tool (INVEST) is a self-evaluation tool comprised of best practices intended to help transportation agencies to integrate sustainability in projects and programs. The INVEST suite is free, open-source and includes a project development module used to self-evaluate specific projects. The project development module is designed to evaluate transportation projects from their planning through construction. Within this module, there are 33 project development (PD) criteria organized into seven project scorecards used to evaluate a project. PD-13, Freight Mobility, is one of these criteria, and discusses several features intended to enhance freight mobility, reduce freight-related noise, and decrease fuel consumption and emissions impacts. Some of the features mentioned are:

- Specific safety improvements for freight, such as additional safety signage and speed warning systems for hills;
- Reducing freight-related noise and designing adjustments for truck safety and mobility, for example through grade separation or alignment;
- Dedicated truck delivery parking areas;
- Electrified rest stops; and

- Truck-only lanes.

Application to Will County

By reviewing a variety of national, regional, and local reports, as well as the proposed Advanced Clean Trucks regulation in California, Task 4 identified several truck-management approaches and strategies. The review found that mitigation strategies share many commonalities and tend to fall into three broad categories: integrated transportation and land use planning, coordination between public and private sectors, and the role of technological advancement. The applicability of each category to the Will County context is addressed in turn.

Integrated Transportation and Land Use Planning

Coordinated transportation and land use planning can ensure that freight-generating land uses are well served by the highway network, as well as direct freight movements away from sensitive areas and toward highways best equipped to handle truck traffic. Successful planning promotes economic growth while at the same time preserving quality of life for local communities. The literature review identified relevant strategies for the study area, including those related to local planning and zoning decision-making, as well as transportation facility design.

On the former, NCHRP 844 identified lot depth and setback requirements to create buffer zones between freight-intensive land uses and their neighbors. These approaches could be reviewed and adopted by municipalities in the study area. Further, NCHRP 33 identified the need for a coordinated system of truck routes and truck restrictions, to direct traffic away from sensitive land uses and toward facilities more appropriate to support freight movement. This recommendation will be moved forward in part by the Task 5 deliverable of the Moving Will County project, and involve coordination action among townships, municipalities, Will County, and IDOT.

Local governments can promote integrated transportation and land use planning by zoning for industrial land uses in areas well served by existing freight transportation assets, including Interstate highways, major arterials, and rail and waterway connections. The Village of Lockport, for example, has permitted new warehousing and distribution developments near I-355, away from the historic downtown and residential areas.

Some of the reports in the literature review emphasized strategies to integrate freight movements in urban areas. While strategies like consolidated consumer delivery locations or off-hours delivery programs may have more applicability to dense urban areas like Chicago or New York City, street design considerations could be applied to historic downtown areas in the study area. Today, IDOT-jurisdiction routes, some of them Class II truck routes, serve as main streets in downtown Joliet, Lockport, and Manhattan. The truck traffic carried by these facilities conflicts with pedestrians and bicyclists, and large trucks have difficulty navigating tight turning radii, parked vehicles on-street, and even placemaking treatments within relatively constrained rights-of-way. However, encouraging or requiring future developments to design for off-street truck loading that does not require backing up on streets and into loading spaces (e.g., circulation area around development) can help mitigate the constraints previously listed.



Figure 1: Example from Elmhurst, IL of industrial development that has off-street truck loading and doesn't require backing up on-street to access. Image credit: Google Maps, 2020.

In relation to site plan design, Will County can encourage that developments situate entrance and exit points so that truck traffic will not be tempted to “short-cut” through residential areas or other non-compatible uses. Additionally, checking that adequate space is available within a development site can help to ensure that maximum queue lengths can be accommodated in order to reduce the risk of trucks stacking on the surrounding street network.

The NYSERDA Project 83178 report identified numerous transportation design strategies to better accommodate large trucks with other road users in mind. Strategies such as recessed stop lines and crosswalks, which provide large vehicles with space for lane encroachment into an adjacent lane, could be a cost-effective way to improve the ability to make tight turns without the need to widen streets in the historic downtowns in the study area. Mountable curbs are another design consideration suitable for some of the denser areas of the county but must be weighed against the potential risk to pedestrians. A strategy to keep other road users safe is to require the use of side guards and convex mirrors on large trucks for all contractors that do business with the County, which is low-cost safety equipment. This requirement would prevent pedestrians, bicyclists, and cars from going under a truck's trailer. As part of their Vision Zero policy, the City of Chicago passed a truck side guard ordinance in 2017⁵⁶. According to an Insurance Institute for Highway Safety study conducted in 2017⁵⁷, underride accounts for approximately half of fatal crashes between passenger vehicles and large trucks. This same study found that effective underride guards dramatically improve the outcome for crash victims, allowing vehicle airbags to be initiated rather than the vehicle being pulled under the tractor and crushed, which almost always results in fatalities.

⁵⁶ <https://visionzerochicago.org/tag/side-guard/>

⁵⁷ <https://www.iihs.org/news/detail/iihs-tests-show-benefits-of-side-underride-guards-for-semitrailers>



Figure 2: In a simulation, a side guard stopped the car from going underneath the trailer. Image credit: IIHS, May, 2017.

Other Complete Street design considerations for freight vehicles in Will County include the following:

- Painted curb extensions may not be as effective in suburban contexts compared to denser urban areas. This design does not provide adequate physical protection for pedestrians. However, the use of truck aprons can provide a more robust form of protection than painted curb extensions (usually about 2-3" high). Truck aprons are more widely seen in the West Coast and Canada. They are frequently used in roundabout design and can be a good application at expressway ramps where pedestrians are present.



Figure 3: The red pavers indicate an example of a truck apron in Burlington, Ontario.. Image credits: Google Maps, 2018.



Figure 4: A truck apron in use. Image credits: Washington State DOT.

- Redesign right turn corner islands and slip lanes (also known as “pork chops”) to improve pedestrian safety while still accommodating heavy vehicles. FHWA’s Pedestrian Safety Guide provides best practices for design guidance, such as making the island sufficiently large to accommodate pedestrians, improving visibility, and making the right channel lane as narrow as possible while still accommodating a design vehicle⁵⁸. Further guidance on these designs as applicable to state roads are in the IDOT Bureau Design and Environment Manual Section 36-2.02 Corner Islands.

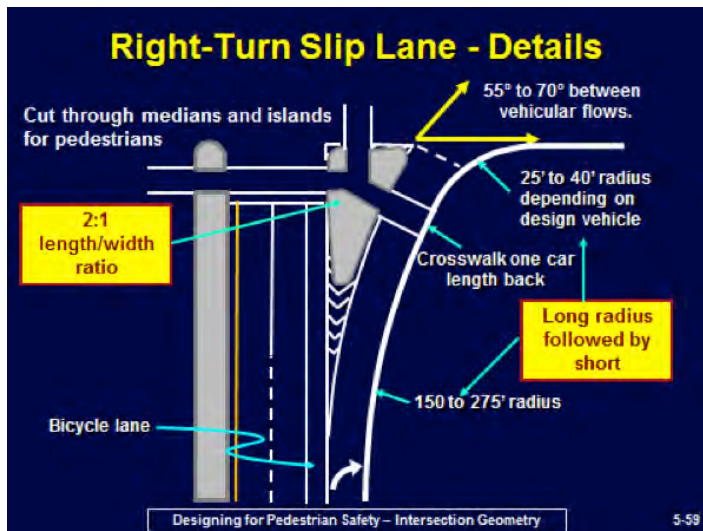


Figure 5: Examples of slip lane and corner island improvements. Image credit: PEDSAFE, FHWA.

⁵⁸ http://pedbikesafe.org/PEDSAFE/countermeasures_detail.cfm?CM_NUM=24

- Per FHWA guidelines, implementing the use of two-center or three-center corner radius can help accommodate turning movements for large trucks while still minimizing pedestrian crossing distances⁵⁹. This design provides the same radius throughout a 90 degree turning sweep. The treatment provides a way to make an intersection more compact while giving larger trucks room to adequately turn.
- Curbside bike lanes at intersections could introduce more bicycle and truck conflicts (right hook crashes) due to right turning movements. These bike lanes put bicyclists in the right-side blind spot of a truck. Potential solutions include adjusting where bicyclists stop at intersections, such as in front of stopped vehicles in a bike box. Or, prior to the intersection approach, the bike lane can be moved to the left of the right vehicular turn lane. If there is a right turn lane, ensure there is space where bikes and trucks are crossing over prior to the intersection.



Figure 6: Installing bike boxes at intersections improve the visibility of bicyclists by providing them a space to wait in front of vehicles. Image credit: North American City Transportation Officials.

⁵⁹ <https://www.fhwa.dot.gov/publications/research/safety/04091/10.cfm>

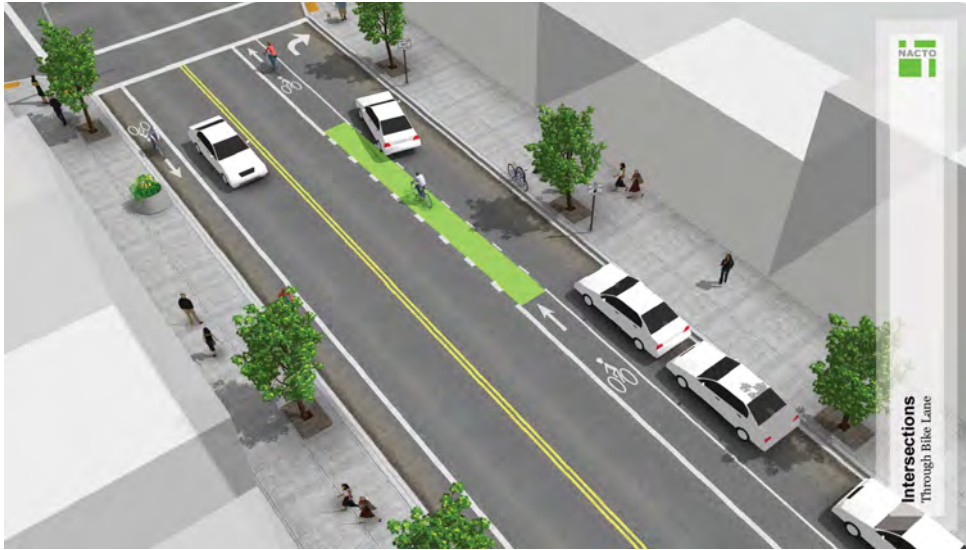


Figure 7: Design guidance for through bike lanes include placing them to the left of the right turn lane. Image credit: Urban Bikeway Design Guide, North American City Transportation Officials.

- Speed cushions could be implemented on lower volume local and collector streets. This treatment would slow down truck traffic and increase safety for bicyclists. Speed cushions provide less drainage issues than other traffic calming treatments like speed bumps.

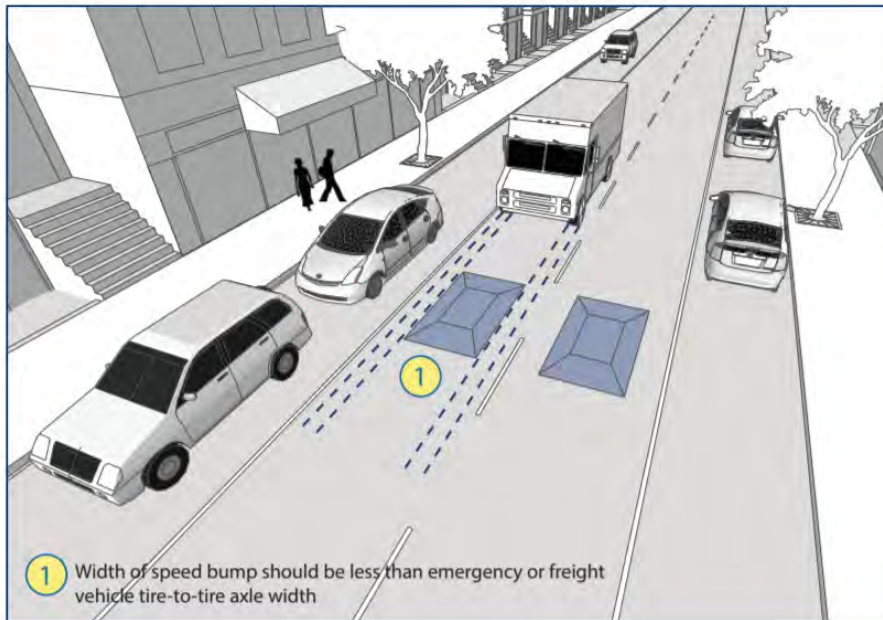


Figure 8: Designing speed cushions to accommodate freight. Image credit: NYSERDA, 2018.

- In terms of signal timing considerations, split phasing would likely be an inefficient application causing congestion at intersections. A solution could be implementing additional clearance phases (e.g., additional yellow and all reds) which would take about six seconds out of the cycle length and could be useful in places where congestion is already low. However, a

new intersection should not intentionally be designed to have signal phasing like this, rather this treatment provides a fix to existing intersections with split phasing.

Another report, Tampa Bay Regional Strategic Freight Plan, developed “context areas” in order to identify context-sensitive freight strategies⁶⁰. The region’s land uses were analyzed by identifying areas that emphasized livability (e.g., higher densities or residential and employment centers), areas characterized by higher levels of freight activity (e.g., industrial or distribution centers), and areas where both livability and freight activity are important. The four basic context areas for consideration were low activity areas, community-oriented areas, freight-oriented areas, and

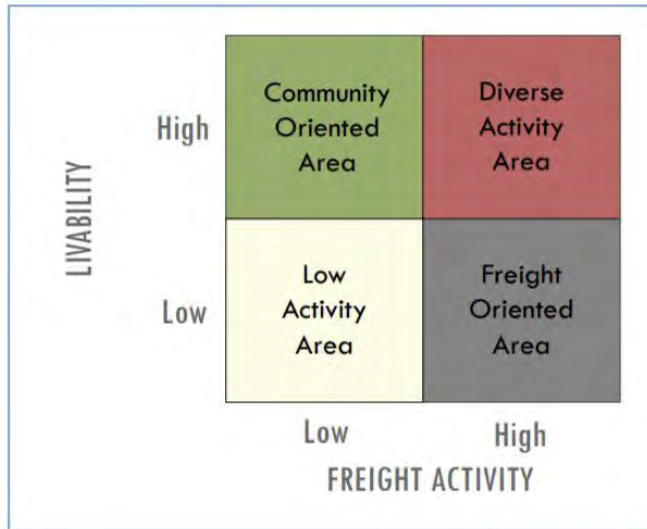


Figure 9: Context areas for context-sensitive freight strategies. Image credit: Tampa Bay Regional Strategic Freight Plan, 2018.

diverse activity areas. Once areas throughout the region were assigned a context area, the plan detailed appropriate design approaches that reflect the balance of goods movement and livability interests for that specific context. Will County has a variety of land uses and areas that fall somewhere on the livability and freight activity spectrums. By considering an approach that identifies and incorporates existing and future land use goals, Will County could develop a freight network that ensures appropriate freight design recommendations that accommodate all road users and land uses in the surrounding area.

Implementing landscape architecture strategies to help mitigate sound impacts from freight is another opportunity to integrate transportation and land use planning. FHWA provides supporting information on the importance of ensuring that freight recommendations are noise compatible with surrounding land uses. If offset from the street and salt impacts are not a concern, shrubs and trees can be used to block truck disturbances. Conifers can provide sight screen and psychological noise blocking effects. This strategy is more effective for blocking sound from neighborhoods than sidewalks. Safety and security can become an issue if walking routes feel secluded or views are blocked, especially at night.

⁶⁰ <https://tampabayfreight.com/resources/study-documents/>

Appendix F

Appendix F. Stakeholder Comments

This appendix includes several stakeholder comments received during the final stages of the project.

Jacqueline A. Henrikson, AICP

From: Todorovic, Milos <mtodorovic@joliet.gov>
Sent: Thursday, July 15, 2021 12:33 PM
To: Jacqueline A. Henrikson, AICP
Cc: Ruddy, Gregory P; Lubash, Russ
Subject: RE: Will County Truck Routing

Jacque,

Thank you for the below guidance. The City would like to issue the following comments:

1. U.S. Route 52 Railroad Grade Separation
 - a. We are interested in obtaining further info on how the overpass suggestion came about, and if there had been discussion regarding feasibility and funding.
2. Arsenal Road between Baseline Road/Elwood International Port Road and IL 53
 - a. We believe this should be a truck route.
3. Briggs Street between I-80 and US 52
 - a. We believe this should be a truck route.
4. Laraway Road Corridor (existing and proposed Class II truck route)
 - a. Interested in how the designation improves funding opportunities. Would like more info.
 - b. We believe this segment would be appropriate for a jurisdictional transfer to IDOT.
5. Hollywood Rd Between I-80 and US 6
 - a. We believe this segment would be appropriate for a jurisdictional transfer to IDOT.

Let me know if you have any questions. Thanks.

R/

Mike

July 15, 2021

Jacque Henrikson, AICP
Civiltech Engineering

RE: **Comments on *Moving Will County Truck Routing Draft Study***
Sent via email to: JHenrikson@civiltechinc.com

Dear Jacque:

Thank you for the opportunity to comment on the draft truck routing portion of the *Moving Will County* study in southwest Will County. We appreciate the collaborative effort to ensure the network of truck routes efficiently moves commerce in ways that complements and supports thriving local communities and the natural resources that are essential for our region to be healthy and resilient. With an intense blend of intermodals, we agree it is critical to balance the needs of local communities, residents, natural and cultural values, and the existing range of industries, from agriculture to intermodal facilities.

I. The Draft Truck Routing Study Largely Reflects Accepted Regional Freight Principles

We appreciate that the truck routing map and assumptions in many places track both the draft *Moving Will County* TDL/Nature map as well as a number of principles in the Chicago Metropolitan Agency for Planning's "[Regional Strategic Freight Direction](#)", released in February 2018. For instance, the draft recommends truck routes largely around clusters of existing intermodal facilities near interstate highways to reduce direct, indirect, and cumulative land use impacts. In acknowledging the hazards posed by incongruent land uses, *Moving Will County* successfully anticipates community and environmental hurdles throughout the planning process. The strategic placement of proposed freight routes and supporting infrastructure away from conflicting usage categories not only influence land use impacts but future development patterns and priorities.

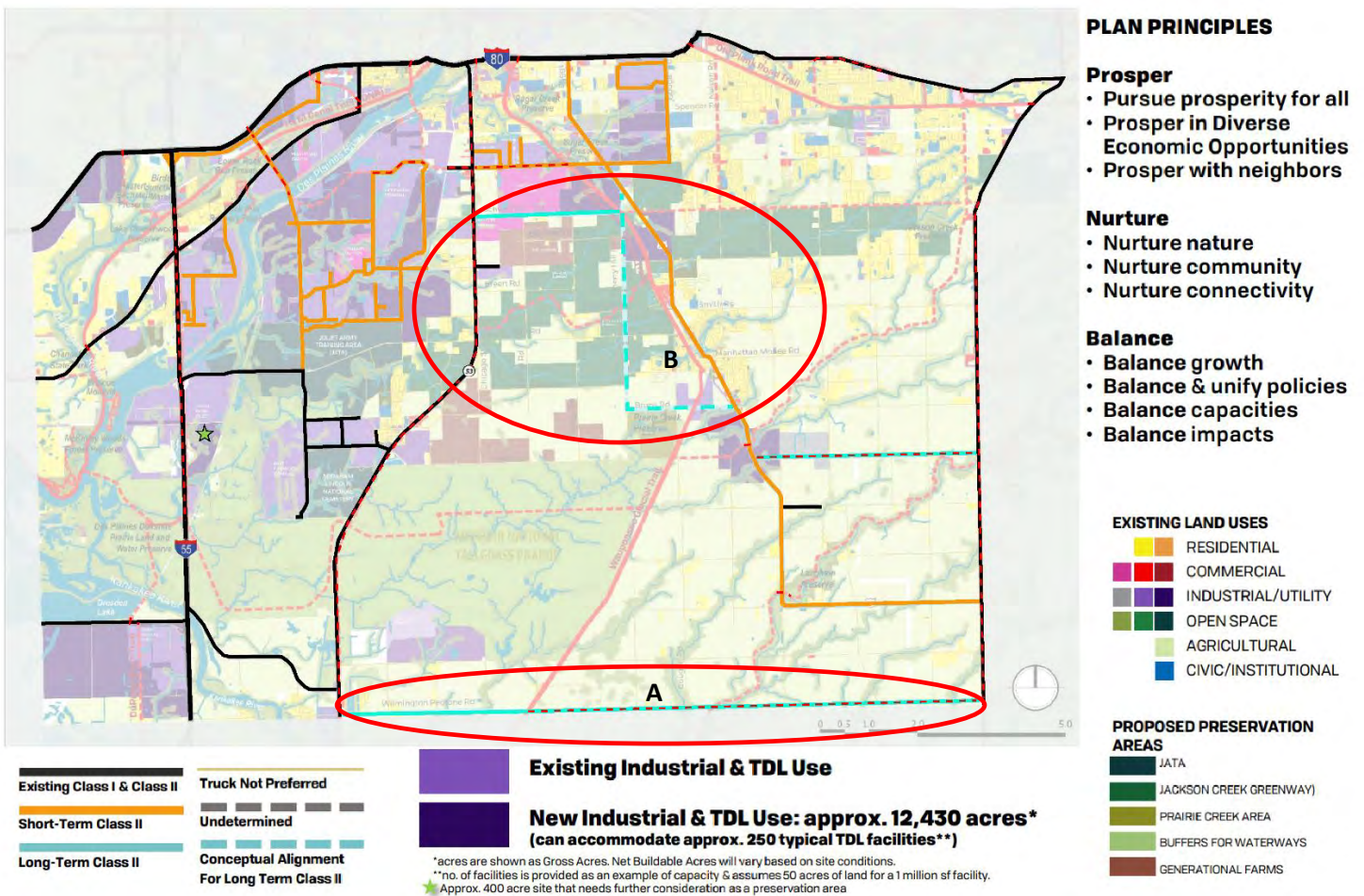
We agree with designating Class II truck routes that are north and east in the area involving Centerpoint UP North and BNSF South, to avoid or minimize harm to neighboring rural communities, rich irreplaceable prime farmland, and iconic globally significant natural resources, such as Midewin National Tallgrass Prairie and the Kankakee River. This in turn also contributes to local and regional resiliency, and the vital conservation of adequate natural and working lands and waters for future generations.

II. Areas of Concern

For the most part, the Class II routes reflect the principle that truck traffic should avoid sensitive areas such as local downtowns, high-quality natural areas, schools, parks, and/or residential neighborhoods.

However, certain south-east orientated Class II routes run directly adjacent to, and, in some cases, through rural communities. Situated far from Interstates 55 and 80, and networks intended to channel industrial traffic, trucking is instead directed through residential parcels. Elementary schools, parks, and institutional facilities can be found within a 1/2-mile buffer of the Willington-Peotone and Cherry Hill roadways. Dense residential clusters are bisected by the proposed routes, which will fundamentally change the livability of those areas. Placing the environmental, health, and safety burdens on traditionally disinvested communities should be avoided and greatly minimized.

We would like to highlight a couple of exceptions where truck routes either would further compress traffic in areas of existing conflict or fracture and degrade regionally significant natural and agricultural resources.



A. Wilmington-Peotone Road Should Not Become a Surrogate Illiana Tollway

We understand that trucks utilize Wilmington-Peotone route at the southern edge of the study area. However, we have serious concerns about how over-expansion of this road could induce many of the same serious adverse impacts that were inherent in the Illiana Tollway. In addition to running precariously close to globally significant natural resources, such as Midewin National Tallgrass Prairie and the Des Plaines Conservation Area, a less constrained footprint would encourage greater traffic to

travel along Route 53 through the Village of Elwood, exacerbating noise, light, vibration, pollution, and the inflow of trucks in the areas of the Abraham Lincoln National Cemetery, running through the center of Midewin National Tallgrass Prairie. As commented upon extensively by dozens of groups, with petitions signed by over a thousand residents, running trucks south from I-80 to a southern road alternative, such as either the Illiana Tollway or Wilmington-Peotone Road, draws trucks into sensitive areas, exacerbating conflicts with residential areas, and ruining some of our nation's finest natural and agricultural lands. Widening Wilmington-Peotone Road will also impact the Wauponsee Glacial Trail, which along with Midewin, is a protected Section 4(f) resource under the U.S. Department of Transportation Act. Last, the area surrounding Wilmington-Peotone Road is replete with numerous Native American anthropological sites of great significance and cultural value that are important to protect.

These serious direct, indirect, and cumulative impacts need to be avoided when considering the future footprint of Wilmington-Peotone Road. The severity of these conflicts in part resulted in intense opposition and an ultimate shift in focus on alternatives, such as improving Interstates 55, 80 and the Houbolt Road Extension. Overexpansion would actually route trucks away from interstates, pulling traffic south and east of clustered facilities and existing infrastructure, contrary to best principles and criteria for freight.

In addition, significant widening of Wilmington-Peotone Road could place pressure on constructing a bridge over the Kankakee River near where it is protected by the State of Illinois as a Land and Water Reserve. State endangered fish swim over federally-listed mussels, with bald eagles flying over the pristine waterway. The Kankakee is also a water supply resource for communities in the area and a renowned regional water trail. Placing pylons into the river would have impacts as well on the downstream Kankakee National Wildlife Refuge and Conservation Area. Instead, we recommend continuing to focus on improvements to Interstates 55 and 80, with bridges over the Des Plaines River.

B. We Oppose the Conceptual Alignment of Cherry Hill Road as a Class II Truck Route.

The conceptual alignment of Cherry Hill Road conflicts with maintaining historic farmland and high-quality streams highlighted as proposed preservation areas in the *Moving Will County* draft TDL/Nature Plan. It would further bisect and degrade an area of prime farmland and centennial farms, with Land Evaluation Site Assessment Scores so high, and soil so rich, that State Policy advises against loss of these resources.

Increasing truck traffic in this rural residential area is also contrary to the principle in the Will County Community Friendly Freight Mobility Plan that new freight development should be focused in existing identified freight clusters, rather than areas identified locally as historic farm sites. Running trucks through this area has been highly opposed by surrounding residents, who have overwhelmingly spoke in favor of maintaining the character and agricultural economy of this part of Will County.

Classifying this path as a Class II truck route would undermine protections for the Jackson Creek Greenway established in the City of Joliet's Zoning Ordinance. As reflected in the draft Moving Will County TDL/Nature Map, the purpose and intent of Section 47-15G.2 of Joliet Ordinance No. 15820, otherwise known as the "Cedar Creek, Sugar Creek, Jackson Creek and Jackson Branch Watershed Protection Ordinance", is to:

“Promote the health, safety and general welfare of persons residing near the Cedar Creek, Sugar Creek, Jackson Creek, and Jackson Branch watersheds and associated drainage areas and wetlands by providing for the protection, preservation, proper maintenance, and use of the Cedar Creek, Sugar Creek, Jackson Creek and Jackson Branch.”

Severe grading and intense truck traffic along this route would degrade water quality, contrary to Section 47-15G2.d by discharging and increasing, rather than filtering and storing “sediments and attached pollutants, nutrients, and organic compounds before they drain into Prairie Creek, Jackson Creek and Jackson Branch. Introduction of sediment, temporarily from grading, and permanently from induced traffic, as well as petroleum, chlorides, metals, nutrients, and other pollutants from trucks and maintaining the route will diminish rather than “maintain the natural pollutant-assimilating capabilities” of the Creek, harm rather than protect wildlife habitat and fish breeding and feeding grounds, all of which will fail to “preserve areas of special recreational, scenic, or scientific interest, including natural areas,” contrary to the ordinance. This will in turn, diminish the “high quality of life of the Joliet community which depends in part on an adequate quality of water, a pleasing natural environment, and recreational opportunities.”

The significance of the Jackson Creek watershed extends far beyond the area protected under the Joliet ordinance. The high-quality stream, with rich ecological diversity, flows through the Joliet Army Training Area, which is land promised by federal statute to be transferred to the U.S. Forest Service to become part of Midewin National Tallgrass Prairie. Degrading this watershed upstream of the JTA would renege on the promise to maintain the integrity of this stream system as an important part of this globally significant landscape.

The Cherry Hill Road alignment will run along the northern boundary of Prairie Creek Preserve, throwing light, noise, pollution, and vibration into this natural area. The Class II truck route would need to undergo significant development in order to accommodate industrial use. As outlined in the City of Joliet Southside Comprehensive Plan, the roadway is currently below base flood elevation of both Jackson Creek and Prairie Creek and will need to be totally reconstructed. Excavation and the associated release of silt will produce damaging and unnecessary strain on the surrounding watershed, while the increased roadway surface area will detrimentally affect infiltration capacity and induce greater flooding in the surrounding communities. This is both contrary to the express protections of the Jackson Creek Watershed and the health and wellbeing of affected communities. The *Will County Comprehensive Stormwater Management Plan* identifies the risk posed by development occurring within the Jackson Creek floodplain area on future flood related damages. Significant alterations to drainage will also affect the quality and productivity of surrounding agricultural businesses.

C. Class II Truck Routes Will Require Careful Implementation in the Lockport and I&M Canal Area.

While we recognize existing industrial uses in the Lockport and I&M Canal area, the Class II truck routes will require careful implementation near Isle de la Cache, Lockport Prairie, and other natural and cultural resources of federal, and regional import. Certain natural areas in the northeast part of the study area, such as Lockport Prairie Nature Preserve and Romeo Prairie Nature Preserve, one of the rarest ecosystems in the world, which harbors federal and state listed species, such as the Hines Emerald

Dragonfly. The hydrology and ecology of these areas must be treated with great care so that truck traffic doesn't result in the degradation or loss of these sensitive resources.

In addition, Lockport and the I&M Canal, as the first National Heritage Area in the nation, include many buildings of cultural and historic significance. Solutions for routing trucks should avoid any impacts to protect these resources.

III. Consideration and Reduction of Impacts to Divested Communities.

While we support clustering TDL and freight into existing industrial areas to minimize impacts on other land uses, we agree with Center for Neighborhood Technology in their assessment that this can also mean increasing the number of trucks traveling in and through divested communities that are already experiencing disproportionate impacts. In this instance, running truck routes more to the east will likewise compound the issue by potentially inducing warehousing in areas with little to no infrastructure, built far from expressways.

This would both drain finite transportation dollars that are needed to maintain and improve the network of roads and bridges that facilitate interstate highways and worsen impacts from increased truck traffic in areas such as south Joliet, which already struggle with increased air pollution and degraded quality of life. Wherever Class II truck routes are situated, it is critical that they are designed and operated to avoid, minimize, and mitigate harm to underserved communities to reverse the current disparity.

IV. Conclusion.

Thank you again for the opportunity to comment on this important initiative.

Kind regards,

Stacy Meyers
Senior Counsel
Openlands
smeyers@openlands.org
312.863.6265

Matthew Santagata
Manager of Regional Planning
Openlands
msantagata@openlands.org
312.863.8298

July 15, 2021



Jacque Henrikson, AICP, Civiltech Engineering

By email: JHenrikson@civiltechinc.com

Dear Jacque:

Thank you for opportunity to offer comments on the draft document, Moving Will County: Truck Routing and Communities Plan Implementation Strategy. In addition to the comments in this letter, CNT also supports the comments offered separately by Openlands.

Summary

We appreciate the effort that the consulting team has made to design a truck routing system that supports the proposed land use plan, advances CMAP's regional freight principles, and serves existing industrial, logistics, and intermodal facilities. It is clear that the team worked to limit negative impact on environmental, agricultural, and cultural resources in the siting of the recommended truck routes.

However, this may have unintended consequences in terms of the impact of proposed truck routes on communities of color and low-income communities. Across the nation, freight facilities and truck routes have often been sited in or near marginalized communities. The result is that the burdens of the freight system – in terms of air quality, safety, depressed local property values, congestion, and others – are concentrated in communities that already suffer from poorer health outcomes and economic disinvestment. Meanwhile, the benefits of a strong freight system are shared regionwide, with many wealthier communities untouched by these negatives. The result is a serious disparity in the distribution of burdens and benefits, which has led many communities of color to consider freight siting and truck routing decisions a matter of environmental justice.

In partnership with Openlands, CNT analyzed the short-term truck routes recommended in the Moving Will County study through a demographic lens. We calculated the demographics of residents near recommended short-term truck routes, focusing on concentrations of Black and Hispanic residents and those under the poverty line, and compared these demographics to the study area overall. This is meant to add to the analysis conducted by the consulting team, which considered sensitive community facilities and downtown character but did not address race or income of nearby residents.

In a nutshell, our conclusion is that people who live near the proposed truck routes are more likely to be Black, Hispanic, or low-income than the residents of the study area overall. This means that without aggressive use of mitigation measures, the recommendations of this study could reinforce and actually worsen historical environmental injustices by race and income. This is certainly not the outcome that we as a region are seeking. However, prohibiting truck traffic in these areas and thereby pushing it into undeveloped agricultural and environmentally sensitive areas is also not a good option. Concentrating freight development in designated infill areas has many benefits, but we do need to consider and address the consequences for those who live nearby.

Thus, we urge the consulting team and the funders of this project to specifically identify areas where marginalized populations are particularly impacted, and to strengthen the mitigation strategies and livability recommendations in these places to reduce the negative impacts of truck traffic on Black, Hispanic, and low-income residents.

Description of demographic analysis

CNT first reviewed the demographics of entire study area, which covers nearly all of western Will County. The entire study area has a population that is, according to the latest American Community Survey (2015-2019), 11% Black and 21% Hispanic, with 8% of residents under the poverty line, and median household income of about \$87,000.

We wanted to determine whether residents who lived near truck routes (which we defined as within ¼ mile) were different demographically than the study area overall. To do this, we created ¼ mile buffers around existing truck routes and tabulated residents who lived in these areas. Approximately one-fourth of the residents of the study area currently live within ¼ mile of a truck route, and as the table below shows, they are more likely to be Black or Hispanic or fall under the poverty line compared to the study area as a whole, and also have notably lower median incomes. This supports CNT’s general observation – which is true across the country, not just in Will County – that vulnerable population groups are more likely to live near truck routes and therefore bear the burdens of freight transportation.

Geography	% Black	% Hispanic	% in poverty	Median income
Study area	11%	21%	8%	\$87,000
Within ¼ mile of existing truck route	14%	27%	11%	\$71,000

With this background understanding, we then calculated the demographics of residents within ¼ mile of the system of short-term Class II truck routes recommended in the Moving Will County study. We focused on short-term routes because their implementation is most immediate and their alignment is best understood; even small changes in alignment would affect demographics, as our buffer is only ¼ mile.

As the table below shows, residents near proposed short-term truck routes are even more likely to be Black or Hispanic; 16% of residents near new routes are Black, compared to 11% of the overall study area, and 30% of residents near new routes are Hispanic, compared to 21% of the overall study area.

Geography	% Black	% Hispanic	% in poverty	Median income
Study area	11%	21%	8%	\$87,000
Within ¼ mile of existing truck route	14%	27%	11%	\$71,000
Within ¼ mile of short-term truck route	16%	30%	11%	\$72,000

Several clusters of short-term route segments have particularly high concentrations of vulnerable populations nearby. These include routes in and near downtown Joliet, due to both the high density of this area and high concentration of Black and Hispanic residents, and several segments in the Bolingbrook area that are near residential areas that are largely Black or Hispanic. Mitigation and livability strategies in these areas are particularly important to adopt. Notable too is the Caton Farm-Bruce Road alignment; while this does not rise to the very top of individual segments in terms of concentrations of vulnerable residents nearby, its size makes it one of the most impactful, largely because of the damage it would cause in the Fairmont community. Reconsideration of this proposed new road would certainly help to reduce the racial and income disparities that our analysis identified.

We understand that many of the proposed new truck routes reflect existing truck traffic already passing through communities and may not necessarily lead to higher overall truck traffic in these areas. But even if the study's recommendations are not creating this disparity and instead merely reflecting it, codifying an existing disparity is still a problem.

We do not believe, and do not mean to suggest, that the consulting team or the project's funders are deliberately positioning truck routes to harm people of color and people in poverty. We understand that the new truck routes are meant to serve existing and planned concentrations of industrial, warehousing, and logistics businesses and accommodate related trucking needs. But regardless of intent, the routes, as a system, do worsen disparities by income and race. These disparities are baked into our land use and transportation systems and will not be solved without conscious effort to undo them.

Notes on analytical methods:

- The figures presented above are from the American Community Survey (2015-2019). This source is not available at the Census block level, so allocation of population to the ¼ mile buffers required us to distribute block group-level population to smaller geographies. To check our results, we compared them to the 2010 Census, which is available at the Census block level; these data are outdated but available at a more appropriate geography. Some individual numbers varied by a percentage point depending on source, but the overall findings were not affected.
- We use the term Hispanic throughout this letter, rather than Latino or Latinx, for consistency with Census terminology, and this includes Hispanics of any race. We use the term Black as the equivalent of the Census category non-Hispanic Black to avoid double-counting.
- We also examined whether existing or proposed truck routes were concentrated near other vulnerable groups, specifically children and the elderly, but did not find meaningful differences. Thus, our analysis focuses solely on race and income, where significant disparities were found.

Conclusion and recommendations

We appreciate the effort of the consulting team to use the truck route recommendations to support the land use plan and serve existing facilities, and we support this direction. But the racial and income disparities noted in this letter are significant and need to be addressed. We believe the most appropriate approach is to strengthen the mitigation strategies and livability recommendations, and to specifically target these to reduce risk for marginalized communities, which is not currently the focus of that section of the report. We do not have time within this public comment period to propose specific mitigation measures, so we are not able to offer any specific recommendations for changes. However, we urge the consulting team and the funders of this project to take action to adjust the recommendations to avoid continuing to concentrate the burdens of our freight system on Black, Hispanic, and low-income people.

Sincerely,



Robert Dean, CEO

Center for Neighborhood Technology

Cc: Chicago Metropolitan Agency for Planning (CMAP)