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MEMORANDUM

To: CMAP Transportation Committee

From: CMAP Staff

Date: April 21, 2017

Re: Draft major freight facility development principles

Major freight facility developments – such as large intermodal truck-rail facilities, the development of large new rail facilities, mergers and acquisitions among Class I railroads, and major new airport and seaport facilities – have significant impacts on the region’s transportation system and land use patterns. They can generate significant amounts of truck and rail traffic, affect multiple jurisdictions, induce major real estate developments, and require significant new public investments in infrastructure improvements.

Given their potential for substantial impacts, proposals for major new freight facilities raise numerous planning questions. While a single county or municipality is responsible for permitting a proposed facility, neighboring and overlapping jurisdictions could also be impacted by the change in land use and transportation demand caused by the facility (see Appendix for local examples). In fact, coordination with other units of government is critical to evaluate potential impacts of the proposed facility on adjacent communities and broader transportation networks. Similarly, major changes to the rail network have strong impacts on transportation and land use in nearby communities.

CMAP’s chief role is to plan for the regional transportation and land use system, and the upcoming Regional Strategic Freight Direction, the region’s short-term freight policy agenda, could develop principles to guide major freight facility developments in northeastern Illinois. In fulfilling its regional planning role, CMAP identifies regionally significant projects in the long-range transportation plan; programs federal transportation funding; coordinates investments across jurisdictions; provides research, data, and other technical resources; and designates freight highway facilities per federal law – all of which are relevant to a regional analysis of major freight facility developments. CMAP has no authority over local land use, but does directly support local planning efforts through the Local Technical Assistance program.

Draft principles for the Regional Strategic Freight Direction

Given the agency's mandate for long-term comprehensive planning, it is reasonable for CMAP to study such major freight facility development proposals. These studies would not represent an official agency decision but would instead provide objective analysis to assist the public debate.

The Regional Strategic Freight Direction cannot anticipate all potential major freight facility developments that may occur in northeastern Illinois. Instead, it could establish principles to guide any potential CMAP staff analysis of these proposals as they come along. These principles are well within CMAP's purview as a comprehensive planning agency; the Regional Strategic Freight Direction would make these principles transparent to assist private railroads and developers; federal, state, and local public agencies; and other stakeholders involved in a major freight facility development. The intent is for CMAP to provide independent analysis to inform the larger policy discussion in the region.

As the regional planning agency and federally-designated metropolitan planning organization, CMAP's main concerns would be centered around the proposal's transportation impacts, land use impacts, and other impacts, as demonstrated by the following series of planning questions:

- **Transportation impacts:** regionally significant projects and broader network impacts
 - Does the proposed major freight development materially affect an approved ON TO 2050 regionally significant project (RSP), including the CREATE program?
 - In addition to costs, considerations include traffic speeds and volumes, delay, and safety – for both passenger and freight movements.
 - Does the proposed major freight development require a new RSP to be considered for amendment into the plan?
 - Considerations include needs on the existing system, planning factors, and other long-term transportation impacts¹.
 - Does the proposed major freight development have convenient and adequate access to expressway facilities or the National Highway System (NHS)?
 - In providing access to expressway facilities or the NHS, will the facility require new roads or the expansion of existing roads?
 - Would the proposal require regulatory or policy changes related to truck routing, parking, or permitting?
 - Are trucks routed away from sensitive areas such as local downtowns, high-quality natural areas, schools, parks, and/or residential neighborhoods?
 - Are trucks routed onto highway facilities with appropriate pavements and geometrics?

¹ Specific evaluation criteria for regionally significant projects will be established separately as part of the ON TO 2050 process.

- Is the permitting process for oversized/overweight trucks transparent, efficient, and harmonized with neighboring and overlapping jurisdictions?
- Is the proposal's funding plan reasonable and adequate?
 - What capital outlays will the facility and any ancillary development require?
 - What will be the long-term operations and maintenance outlays for these facilities?
 - For both initial and long-term funding requirements, how will costs be shared between public and private sectors?
 - Which costs will be borne by the private sector?
 - Which costs will be borne by public-sector agencies?
 - State agencies
 - County agencies
 - Township agencies
 - Municipal agencies
 - Do the relevant public sector entities have sufficient funding streams in place to meet these costs, both initial and ongoing?
- Are special accommodations necessary to ensure that an appropriate workforce can access the proposed major freight facility?
 - Are transit, bicycle, or pedestrian options available?
- **Land use impacts:** regional development patterns and natural resources
 - Does the proposed major freight development support investment in existing communities?
 - Does the local jurisdiction have appropriate zoning for the facility, particularly to avoid potential land use conflicts and potential nuisances like vibration and noise?
 - Considerations include size, bulk, coverage, and orientation of buildings on site; minimum parking requirements; operational restrictions by time of day; landscaping and aesthetics; and stormwater management and other environmental concerns.
 - Does the local jurisdiction anticipate ancillary development related to the facility? Does the local jurisdiction seek to encourage or discourage ancillary development?
 - In either case, both long-term planning and zoning codes should be updated to reflect these preferences and to ensure consistency of future development with the expectations established by the initial proposal for the freight facility.
- **Other impacts:** economic development, equity, and the environment
 - Does the proposed major freight development support regional economic development goals?

- Would the proposal create new jobs and economic development that would not be in the region otherwise? Would this development be in existing communities?
- How would the proposal affect agricultural and natural resources, including the Green Infrastructure Vision?
- How would the proposal affect air quality?
- Does the proposed major freight development have a disproportionate impact on environmental justice communities?
- Does the proposal incorporate innovative technologies?

To perform such analysis, the Regional Strategic Freight Direction could stress the importance of appropriate access to data for CMAP and other public agencies. Private data sources must be handled in a sensitive manner, but appropriate protections can be established to provide access to this data for regional planning purposes. Access to information is a foundational issue; no objective, data-driven analysis is possible without it.

ACTION REQUESTED: Discussion

Appendix: Examples of multijurisdictional impacts of major freight facility developments

Example 1: Intermodal growth

In some areas, the rapid growth of intermodal shipments has required new infrastructure investments. For example, three Will County intermodal facilities –BNSF’s Logistics Park Chicago, UP’s Joliet Intermodal Terminal, and CN’s Joliet Terminal – together handle some 1.5 million intermodal lifts each year, or about 20 percent of the regional total². These facilities are fairly new, having opened between 2002 and 2014, but have already generated investment in some 20 million square feet³ of ancillary transportation, logistics, and distribution development.

Given the configuration of the road network in western Will County, several major transportation improvements have been completed or proposed to improve access to the area, including the following⁴:

- **Arsenal Road Improvements (complete).** To accommodate intermodal terminal traffic, Will County built additional lanes and a railroad grade separation on Arsenal Road between I-55 and Baseline Road. Will County has since transferred the jurisdiction of Arsenal Road to IDOT.
- **Arsenal Road Interchange (complete), \$84 million.** Opened in 2012, this IDOT project replaced the former interchange located next to the Des Plaines River with a new free-flow interchange about one mile to the south. The new design is more efficient compared to the old interchange, which was too close to a high-level bridge over the Des Plaines River, creating a substantial safety issue involving slow-moving trucks on I-55..
- **Houbolt Road Bridge (proposed), \$170-190 million.** In July 2016, IDOT announced a public-private partnership with CenterPoint to develop a new toll bridge over the Des Plaines River, linking the intermodal facilities, particularly the Joliet Intermodal Terminal, to the south with Houbolt Road and I-80 to the north. CenterPoint will provide the bulk of the funding and would be repaid through toll revenue; IDOT will provide a smaller amount of funding to improve local access roads and reconfigure the interchange between Houbolt Road and I-80 to accommodate greater truck traffic.

The transportation impacts of major intermodal facilities are felt across multiple jurisdictions. For example, direct access from I-55 to the BNSF Logistics Park Chicago facility originally

² CMAP, February 2017. “Chicago intermodal facility lift counts and regional TEU estimate.” Available online: http://www.cmap.illinois.gov/documents/10180/19427/FacilityLiftCountANALYSIS_Revised2015_20170223.pdf/31a31b6d-a02c-48c7-aedf-31d4b7563ccf.

³ CenterPoint Intermodal Center, Key Park Statistics: <http://www.centerpoint-intermodal.com/>.

⁴ Various data sources, including: Channick, Robert, July 11, 2016. “Toll bridge to link I-80 to CenterPoint transportation hub.” Chicago Tribune. Available online: <http://www.chicagotribune.com/business/ct-centerpoint-toll-bridge-joliet-0712-biz-20160711-story.html>.

included a mix of state (I-55), county (Arsenal Road), and municipal (Baseline Road) roads⁵. Arsenal Road was not built to sufficient standards to accommodate high-volume intermodal traffic, and needed to be improved. In addition, in 2015 the Will County Board moved to temporarily increase the permitting weight limit for Arsenal Road, and later that year IDOT agreed to assume jurisdiction of Arsenal Road from Will County. The transfer to state jurisdiction should allow IDOT to streamline the permitting process for oversized and overweight trucks.

In part learning from the impacts of goods movement in Will County, the county government, in partnership with the Will County Center for Economic Development and other organizations, is currently developing a Community Friendly Freight Mobility Plan⁶. Due to be completed by summer 2017, the Community Friendly Freight Mobility Plan will incorporate not only freight mobility issues but also land use, workforce, training, and livability concerns.

Example 2: Impacts of rail industry acquisitions

EJ&E: To avoid congestion and to provide a fully controlled route through Chicago, the Canadian National Railway (CN) purchased the Elgin, Joliet and Eastern Railway line (EJ&E) in 2009⁷. This acquisition has allowed CN to divert approximately 6,000 cars per day out of the heavily congested downtown rail lines.

While this rerouting benefits communities along the original route through Chicago and the central part of the region by reducing motorist delay at highway-rail grade crossings, it has increased rail volumes and motorist delay along the new route at the edge of the region. There are also concerns related to noise and safety⁸. Twenty-nine local governments along the corridor have signed voluntary mitigation agreements with CN, which pledged some \$23 million to provide additional mitigation measures, such as safety equipment at crossings, road closures, and noise mitigation measures⁹.

Nevertheless, state and local governments have still needed to invest heavily in the corridor to reduce the community impacts of the increased rail traffic. For example, several grade separation projects are in design or under construction across the region. For two of these projects, US 34 in Aurora and US 30 in Lynwood, the federal Surface Transportation Board (STB) required CN to pay over two-thirds of the cost of grade separation projects as part of its decision allowing the EJ&E acquisition¹⁰. However, this funding arrangement is atypical, and most grade separation projects are funded almost entirely by the public sector, including projects at Rollins Road in Round Lake Beach, US 14 in Barrington, IL 60/83 in Mundelein, and

⁵ CMAP, October 17, 2016. "Intermodal facilities and regional policy." Memorandum to the CMAP Freight Committee. Available online: http://www.cmap.illinois.gov/documents/10180/587121/Freight+Committee_intermodal+policy_20161024.pdf/804b7f1a-307f-4516-b720-983b67e92283.

⁶ <http://www.willcountyfreight.org/>.

⁷ http://www.cmap.illinois.gov/about/updates/-/asset_publisher/UIMfSLnFfMB6/content/update-on-freight-rail-activity

⁸ CN is required to report accidents and incidents, street crossing blockages exceeding 10 minutes, train volumes, and infrastructure projects to the Surface Transportation Board on a monthly basis: <http://www.stbfinancedocket35087.com/html/monthlyreports.html>.

⁹ <https://www.icc.illinois.gov/railroad/cnacquisition.aspx>

¹⁰ <http://www.stbfinancedocket35087.com/html/pdfs/08dec24Decision16.pdf>

Washington Street in Grayslake. A single grade separation project in the outer part of the region can easily cost more than \$25 million¹¹.

Elsdon Subdivision: In 2013, CSX Transportation acquired trackage rights over the Elsdon Line, running from northwest Indiana through suburban Cook County and to the southwest side of Chicago, from CN¹². This transaction allowed CSX to reroute trains from four other lines to the Elsdon Line. In reviewing the proposed transaction, the STB's Final Environmental Assessment identified two potential areas of concern related to emergency response and noise and vibration, but concluded that the voluntary mitigation measures proposed by CSX would be sufficient to avoid adverse environmental impacts¹³. Many of the voluntary mitigation measures focused on operational practices and improving the line's signaling systems.

However, train volumes along the line doubled after 2013, causing motorist delay at grade crossings in Chicago and suburban Evergreen Green, including many instances of delay greater than 10 minutes. Blocked crossings not only increase traffic congestion but also reduce reliable access to emergency vehicles. The latter is of particular concern, given the vicinity of two area hospitals, Advocate Christ Medical Center in Oak Lawn – home to one of the region's few trauma centers – and Little Company of Mary Hospital in Evergreen Park.

Although CSX invested in improved signals and grade crossing infrastructure along the route, local concern over adverse community impacts continued. In 2016, the City of Chicago and Village of Evergreen Park petitioned the STB to reopen the docket and impose sanctions on CSX¹⁴. Later in 2016, the STB reopened the docket, required CSX to comply with the statements made in its original application – namely, that CSX would not route a train through the Elsdon Line unless the line was clear – and ordered 12 months of performance reporting on grade crossings along the line¹⁵. Recent reports show continued instances of excessive delay at grade crossings along the line, in some cases exceeding two hours¹⁶.

¹¹ Examples: approximately \$31 million in construction for [Rollins Rd](#), \$27 million for [US 30](#), and \$27 million for [US 34](#).

¹² [https://www.stb.gov/Decisions/readingroom.nsf/UNID/41A862BE6A12B84085257B0C00532BBD/\\$file/42823.pdf](https://www.stb.gov/Decisions/readingroom.nsf/UNID/41A862BE6A12B84085257B0C00532BBD/$file/42823.pdf)

¹³ [https://www.stb.gov/decisions/readingroom.nsf/UNID/AB98FF38EFC5511C85257AED0075ADA6/\\$file/42871.pdf](https://www.stb.gov/decisions/readingroom.nsf/UNID/AB98FF38EFC5511C85257AED0075ADA6/$file/42871.pdf)

¹⁴ [https://www.stb.gov/Filings/all.nsf/d6ef3e0bc7fe3c6085256fe1004f61cb/c6fac9fb6aa6355485257f5b006678f1/\\$FILE/240117.pdf](https://www.stb.gov/Filings/all.nsf/d6ef3e0bc7fe3c6085256fe1004f61cb/c6fac9fb6aa6355485257f5b006678f1/$FILE/240117.pdf)

¹⁵ [https://www.stb.gov/decisions/readingroom.nsf/UNID/D3C0B4ED40A3BAD585257FDA0056D1E0/\\$file/45126.pdf](https://www.stb.gov/decisions/readingroom.nsf/UNID/D3C0B4ED40A3BAD585257FDA0056D1E0/$file/45126.pdf)

¹⁶ For example, CSX monthly data reporting filed September 2016:

[https://www.stb.gov/Filings/all.nsf/d6ef3e0bc7fe3c6085256fe1004f61cb/8984755caf766d148525802f0075fbc9/\\$FILE/341509.pdf](https://www.stb.gov/Filings/all.nsf/d6ef3e0bc7fe3c6085256fe1004f61cb/8984755caf766d148525802f0075fbc9/$FILE/341509.pdf)