

Examples of Local and Regional Freight Initiatives

Three geographically dispersed freight initiatives undertaken in the United States that are useful examples of local/regional freight initiatives include:

- CREATE in Chicago
- The Atlanta Regional Freight Mobility Plan
- The FAST Corridor in Seattle

There exists a wide range of variability between the examples studied. The level of influence, knowledge, participation, and attentiveness regarding freight issues were significantly different among examples. Also, the organization of planning entities within a metropolitan area, especially larger ones, can often be multifaceted, with different priorities among the entities. Recognizing these differences, our goal is to identify specific initiatives that have been adopted within the studied regions, along with the activities of some of the more influential organizations within these regions. Envision Freight recommends that all three of these initiatives as good models for a MPO or Regional Freight Visioning Group to follow.

CHICAGO CREATE

Chicago is one of the most important freight centers in the United States. Most importantly, it serves as the connection point between the western and eastern railroads and as a pivotal trucking node in the Midwest. Due to its expansive size and population, entities involved within Chicago came together to create the Chicago Region Environmental and Transportation Efficiency program ("CREATE"). The program is a partnership among USDOT, Illinois DOT, City of Chicago DOT, and the Association of American Railroads, which encompasses the following area railroad entities within the project:²

- BNSF Railway
- Canadian Pacific Railway
- CN
- CSX Transportation
- Norfolk Southern Corporation
- Union Pacific Railroad
- Metra (Northeast Illinois commuter rail system)
- Amtrak

¹ http://www.createprogram.org.

² http://www.createprogram.org/about-partners.html.



CREATE's primary focus is to improve the area's rail system and lessen the impact of freight transport upon the region's environment by proposing and managing freight transportation projects within the Chicago region. The majority of the projects are focused on the improvement of known bottlenecks, elimination of at-grade railroad/street crossings, and system upgrades, all designed to reduce congestion and improve both economic and environmental performance of the area's network.

In addition to the CREATE effort, Chicago's various planning agencies also provide freight-related contributions to the area. The Chicago Metropolitan Agency for Planning ("CMAP"), the Chicago area's MPO, has instituted freight topics within its various reports and plans, including the 2030 Regional Transportation Plan for Northeastern Illinois. It also has a dedicated committee on freight, made up of various public and private entities, which has produced reports and studies that relate to the encroachment and protection issue. These documents will be discussed in greater detail in the next section. Lastly, the City of Chicago has also been freight-aware, producing a Chicago Downtown Freight Study to analyze freight issues within the downtown sector of Chicago.

CREATE does not attempt to influence policy matters other than pushing for system improvements to be funded and approved. It is primarily concerned with upgrading the Chicago area's railroad system through such efforts as grade separation, separating freight and transit lines, and upgrading the technical infrastructure to make the system safer and more efficient.

CREATE's relevance for Envision Freight is its accomplishment of bringing together the area's major players within the freight transportation arena. Before CREATE, individual railroads were reluctant to invest in the Chicago area infrastructure, as it was deemed the impact and return would be too small per individual railroad. Coming together for CREATE helped all of the stakeholders realize the overall benefits and allowed for unified goals, which in turn improved the perceived return on investment due to the reliance on knowing the system as a whole was being improved.³ It is in this respect that the coalition serves as a model to the rest of the nation, as it shows how public-private partnerships can be formed and how effective they can be in prioritizing freight projects in order to keep freight networks viable within a region.

Although no policy influence to ensure a reduction in encroachment upon freight facilities has been identified as a result of the effort, the group's work has resulted in millions of dollars being invested in Chicago's freight infrastructure, thus indirectly preserving many of its freight routes for the immediate future. Because the focus of the project is specific towards infrastructure adjustments, its influence on preventing future conflicts with Chicago's freight network is limited. The focus on freight operations and desire to improve existing freight corridors acts as a means to preserving freight infrastructure, but there is no ability to ensure that future conflicts in terms of land use and incompatible coexistence will not arise, as this is outside the scope and

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³ Booney, J. (2009, April 20). Untangling the Chicago Knot. *The Journal of Commerce*. Retrieved from http://www.createprogram.org/PDF/2009.2.20_Untangling%20the%20Chicago%20Knot.JOC.pdf.



ability of the group. Such responsibility would rest with assigned planning agencies to advance and local governments to execute.

Chicago Metropolitan Agency for Planning – Freight and Transportation Committees

Based on available documentation on CMAP's website, the Freight Committee mainly produces data, strategies, and recommendations, which are likely used by CMAP's Transportation Committee. The freight committee has produced some useful reports that relate well to the Envision Freight's focus.

The first report of interest is the *Regional Freight Planning Recommendations Study Policy Options* document. This table of policy recommendations varies in scope, but does advocate various measures for encroachment prevention and freight network preservation, such as:

- Identify, assess and implement freight corridors & facilities of regional significance, including clustering of warehousing, distribution and other freight-related centers, based on freight O-D patterns
- Identify, assess and implement opportunities for corridor preservation
- Identify and promote good practices to facilitate freight movements and mitigate impacts in a variety of land use and development environments
- Establish "CREATE" counterpart for trucking industry which could include policy options such as:
 - Identify potential locations and funding sources for expanded truck parking/rest areas with appropriate amenities to enable compatibility with surrounding land uses
 - Expand and enhance the truck route system in the metro area, integrating other aspects of CREATE for Trucks to optimize the system
 - Develop a broadly-available freight planning geodatabase for use by public and private stakeholders to identify regional freight system needs and to coordinate action through information sharing and mutual cooperation. The planning geodatabase would include such items as local and state truck routes, clearance issues, weight restrictions, traffic generators, congestion, parking, and rest areas
- Establish governance structure, such as a Port Authority, to identify issues, guide investments and advocate on behalf of the region through public outreach and education, promoting the Chicago economy and protecting the public interest
- Identify and implement design features to control freight-related noise
- Support City of Chicago industrial corridor designations of Planned Manufacturing Districts.



The table additionally displays which agencies would be responsible for each recommendation's implementation and gives a priority rating from "Low" to "High." Most of the recommendations listed above were given a "High" priority.⁴

Another report of interest produced by/for the committee is the *Regional Freight System Planning Recommendations Study*, which was a survey of public and private entities to obtain opinions of stakeholders on the freight arena in Chicago. Relevant topics introduced include barriers to expand rail routes within the city, passenger rail services competing with freight rail services for access, limited O'Hare Airport availability for cargo facility development due to community opposition, and regulations limiting development alongside waterways. The report also does a good job of comparing public responses to questions versus private sector responses. Lastly, the report clearly shows the disparity between land use planning and freight transportation planning, as only half of the communities surveyed stated they consider freight when developing land use policy.⁵

Yet another report, *Action Strategy Paper: Goods Movement*, identifies how freight can be better integrated into the planning process and public awareness. It is primarily meant to be a guide for how MPOs can accomplish this advancement, focusing on education, land use, and comprehensive freight planning as the role for an MPO and the vital steps required to ensure freight is properly considered going forward.⁶ In fact, the report frankly states the following in respect to MPOs:

To date, education and guidance appear to be the only tools available for MPOs to affect land use decisions. However, understanding how freight operations and communities can coexist by planning in a comprehensive way will assist in mitigating future conflicts.⁷

There are additional topics and recommendations covered within the report, The Freight Committee has also produced a variety of maps that other MPOs may want to consider producing as well. The following are examples of maps that could help interested parties see the importance of freight infrastructure within the region:⁸

⁴ Cambridge Systematics. (2009, December 3). *Regional Freight Planning Recommendations Study Policy Options*. Retrieved from Chicago Metropolitan Agency for Planning website:

http://www.cmap.illinois.gov/WorkArea/DownloadAsset.aspx?id=18015.

⁵ Cambridge Systematics. (2009, October 16). *Regional Freight System Planning Recommendations Study: Draft Freight Stakeholder Outreach Technical Memorandum* (technical memorandum). Retrieved from Chicago Metropolitan Agency for Planning website:

http://www.cmap.illinois.gov/WorkArea/DownloadAsset.aspx?id=17894.

⁶ Smichenko, S. (2008, October). *Action Strategy Report Paper: Goods Movement* (The Volpe Center, Ed.). Retrieved from Chicago Metropolitan Agency for Planning website: http://www.cmap.illinois.gov/WorkArea/DownloadAsset.aspx?id=15225.

⁷ *Id.* p. 22.

⁸ http://www.cmap.illinois.gov/cmp/freightsystem.aspx.



- Chicago Midway and Surroundings
- Access to Transcontinental Rail Lines
- Major Truck-Rail Safety Conflicts
- Truck Parking Facilities
- Intermodal Facility-Land Use Maps

The CMAP Freight Committee produces a lot of useful information for the MPO, but it's unclear how prominent its findings are. There is no general freight plan or cohesive report. Rather, it's a multitude of reports and analysis that likely is consumed by the Transportation Committee during the development of transportation plans, such as the 2030 Regional Transportation Plan ("RTP"). Such works do cover freight-related information, including some land use highlighting, but not to the extent that a dedicated freight plan might give. The Freight Committee reports presented here are somewhat similar to accessory reports that were used for the Atlanta freight plan (discussed in an upcoming section), and thus could be the basis for a similar plan for the Chicago area. This can also be more beneficial than a general RTP because RTPs cover all transportation topics, and thus freight issues can often become downplayed or relevant topics can be presented in too broad of a perspective. This is somewhat the case in the 2030 RTP. This is not to say that such efforts shouldn't contain freight directives, but the production of a freight-only report in step with something like an RTP might be more beneficial.

Lastly, the Transportation Committee has produced a couple of maps that could prove to be useful for local governments. The Strategic Regional Freight System map⁹ documents important freight corridors and land uses, while the Sensitive Natural Resources map¹⁰ relates 2030 RTP projects with the level of sensitivity of the area's environment.

Chicago Department of Transportation Chicago Downtown Freight Study

In 2008, the Chicago DOT gave a presentation on the findings of a study that evaluated the freight operations of downtown Chicago. The study presentation focuses on trucks and the access issues they face when transporting within downtown. Two of the major and relevant issues presented are passenger vehicle encroachment on loading areas and parking/loading area obstruction by dumpsters and passenger vehicles. Various mitigation tactics are discussed, including increased enforcement of parking violations, building design codes that restrict dumpster locations or require a dumpster designated area, incorporating parking/dock locations into GIS databases, and improving/increasing signage designating areas for commercial use only.¹¹

⁹ http://www.cmap.illinois.gov/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=5588.

¹⁰ http://www.cmap.illinois.gov/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=5582.

¹¹ McGrudder, B., Edwards and Kelcey, Fish Transportation Group, Kowalenko Consulting Group, & Chicago Department of Transportation. (2008, November 6). *Chicago Downtown Freight Study*. PowerPoint Presentation presented at Chicago Metropolitan Agency for Planning - Freight Committee meeting. Retrieved from the Chicago Metropolitan Agency for Planning website:

http://www.cmap.illinois.gov/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=11552.



Although only focusing on the downtown area of Chicago, the report presentation puts forth some interesting issues that only a densely populated urban core would experience. Parking is a valuable commodity in such areas, and passenger vehicles often compete with freight drivers who already have a difficult task of navigating the density. Such conflicts, and other obstacles that can interfere with downtown freight transport, are important aspects to consider and are often absent from other documentation reviewed, which are primarily regional in scope.

ATLANTA REGIONAL FREIGHT MOBILITY PLAN ("ARFMP")

Under the suggestions from the Atlanta Regional Freight Task Force, the Atlanta Regional Commission ("ARC") and Georgia DOT ("GDOT") developed the Atlanta Regional Freight Mobility Plan ("ARFMP"). Like Chicago, Atlanta is an important freight node for rail and trucking with major railroads and important interstate routes traversing the region. The plan aims to be a complete documentation of the freight sector within the Atlanta area, covering everything from mapping the network to providing policy analysis and recommendations. The plan is perhaps the most encroachment-aware plan amongst major metropolitan areas, giving much needed attention to land use compatibility issues and even providing five case studies that evaluate the potential for future land use conflicts. In order to accomplish this, ARC solicited the input of various private sector entities, from major trucking companies to distribution centers. The result was a cohesive, all-encompassing analysis and recommendation report that Atlanta area communities could use to better facilitate freight network preservation into their transportation and land use operations.

As stated earlier, the ARFMP is a freight plan for Atlanta that strives to document, understand, and promote freight-related operations in the Atlanta area. It is perhaps one of the most comprehensive freight plans in the nation and is a model plan for its focus on land use when it comes to freight. The effort is made up of not only the final plan report, but also of additional supporting documents that led to the finalized plan. Unlike other plans that mention land use simply in the context of avoiding goods movement near non-industrial areas, the ARFMP looks at both sides of land use (non-industrial and industrial) to ensure a sustainable coexistence. The report itself encompasses the many aspects of freight, but for this project's interests, the major focal points are the plan's land use documentation and recommendations, incorporation of both public and private stakeholder survey responses, and the cataloging of freight network and infrastructure within the Atlanta area, and recommendations to amend zoning codes to reduce encroachment conflicts in the future. ¹²

Although the documentation of freight infrastructure and the inclusion of various stakeholders in the process are important, the main component of interest is the focus on land use and encroachment issues within the report. The "Land Use Evaluation" section gives a brief overview of the land use atmosphere of Atlanta in terms of freight. It identifies how key freight corridors are experiencing the encroachment of non-industrial use due to close roadway access,

¹² Wilbur Smith Associates, Global Insight, Georgia Institute of Technology, & Street Smarts. (2008, February). *Atlanta Regional Freight Mobility Report* (Final Report). Retrieved from Atlanta Regional Commission website: http://www.atlantaregional.com/documents/tp_ARFMP_final_report_2-6-08.pdf.



which in turn raises property values and drives freight operations to the fringe of the city. It also notes that planning and zoning currently does not take into account the unique nature of freight and industrial uses and instead focuses on traffic volume and congestion associated with those types of uses. The section ends with a list of recommendations for future transportation planning efforts, which includes coordinating "freight and non-freight land uses and mobility needs" and ensuring "adequate segregation and protection of different land uses." ¹³

The plan later focuses on discussing land use conflicts and encroachment of residential use upon freight areas. In the "Land Use Conflicts" section, the plan highlights the need for local governments to adequately plan for the inclusion of freight operations within the area, whether such operations are desired or not. It states that Atlanta is an important freight operations center, and because of this fact, industrial and warehouse/distribution operations will continue to grow within the region. Keeping these operations in mind will not only help the efficient movement of goods, but also of passengers. The "Encroachment of Residential Use into Traditionally Industrial Corridors/Areas" further discusses the impact of encroachment and land use conflicts upon freight operations. Such development, if done without adequate considerations for freight needs, often leads to poor access for freight facilities with increased traffic during peak travel periods and mitigation controls that negatively constrain freight activities, such as noise abatement policies.¹⁴

The plan also highlights the need for education and influence efforts by ARC. It suggests that relaying documented benefits of freight operations will help reduce the ever increasing "not in my backyard" attitude. Additionally, because ARC doesn't have direct control over land uses, it needs to offer its resources to assist local governments in their planning efforts in order to influence a higher awareness of freight planning and land use considerations, and in redeveloping zoning codes.¹⁵

After the plan's analysis of the current freight situation within the Atlanta region it goes through a screening process for potential strategies and recommendations. Within this section is a list of criteria questions that were asked during their evaluation. This list provides some excellent questions that planning organizations and local governments can use when evaluating potential projects. Relevant criteria include: 16

- **Community Impacts**: How much will the project or strategy reduce community impacts associated with goods movement along transport corridors and freight intensive areas, including those in dense areas?
- Land Use Impacts Transport Corridors: How much will the project or strategy reduce land use impacts associated with goods movement along transport corridors?

¹³ *Id.* pp. 43-45. ¹⁴ *Id.* pp. 67-68. ¹⁵ *Id.* pp. 69-70.

¹⁶ *Id.* pp. 80-81.



Land Use Impacts - Intermodal/Warehouse/Distribution Facilities: How much will the project or the strategy reduce land use impacts associated with goods movement between intermodal yards, warehouse and distribution facilities?

After the screening section, the report puts forth its recommendations. The beginning of the section outlines various aspects of projects that impact freight operations, such as planning and programming, land use planning, transportation planning, and stakeholder involvement. Within each of these bullet points are directives to assist freight operations within the respective aspect. Notable directives include:¹⁷

- Making freight an integral component of the regional planning and programming processes (Planning and Programming)
- Preservation of existing freight intensive areas (Land Use Planning)
- Development and implement freight supportive land use guidelines (Land Use Planning)
- Need for foresight in long range transportation and land use planning, and the shared interests of the private and public sector (Transportation Planning)

Specific policy and approach recommendations follow, including: 18

- Provide local government freight-related training and capacity building
- Educate the public about the existence, role, and benefits of freight within the community
- Prepare a regional truck route plan and identify freight districts
- Incorporate the Land Use Coordinating Committee ("LUCC") into the discussion in order to help identify opportunities to preserve freight-related areas
- Produce freight-related land use guides

Lastly, the plan puts forth an implementation plan, which is a tabled section of the report that documents freight-related projects that should be undertaken, along with a description, cost estimate, and list of potentially responsible agencies for each project. Notable projects that have not yet been listed in some shape or fashion above include: ¹⁹

- Incorporating freight-supportive policies in future transportation-related plans, which includes preserving current freight-focused land uses. May include the promotion of land acquisition and private sector incentives for redevelopment of outdated or undesirable freight facilities.
- Adding "ex-officio" freight industry representatives to relevant committees, such as LUCC.
- Develop a freight planning newsletter.
- Coordinate with peer regions to exchange information, ideas, and strategies.

¹⁷ *Id.* pp. 83-84. ¹⁸ *Id.* pp. 84-88.

¹⁹ *Id.* pp. 108-119.



- More detailed studies of areas with land use conflicts and what can be done to protect freight land use.
- Preserve in-town terminals.²⁰

One additional topic was revealed in the analysis of this report that did not fit cohesively within the above evaluation and documentation. It was mentioned in the report that real estate advisors noted congestion was not often factored into site location by distribution centers. One real estate advisor addressed the issue by avoiding a particular area of town if it was deemed that the distribution center would rely heavily on a known congested freeway.²¹ The plan does not further explore this interesting detail, thus a potential recommendation is to work with and educate real estate advisors as to land use and location selection in order to better assist distribution operations select a more sustainable and suitable location. This could also be an opportunity to decrease the likelihood of a large operation moving into an area where incompatible uses "peacefully" coexist due to the relatively small size of current or former industrial tenants.

In summary, the plan recognizes that "simply implementing larger infrastructure investments will not achieve the goal of both enhancing freight mobility and mitigating the negative community impacts associated with freight movement."²² It analyzes and puts forth various recommendations and directives, of which many are specifically related to land use awareness and improvements when dealing with freight operations. Due to the ARFMP's completeness and keen focus on land use pertaining to freight operations, the plan can serve as a model for other planning organizations to begin a freight planning and documentation effort.

Various studies and analysis were conducted prior to the production of the final report, which were used in its formulation. Much of this information is contained within the Draft Needs Assessment Report and the Community & Environmental Impact Scan and Assessment reports which also conducted an environmental justice analysis.²³ The latter is particularly impressive, as it provides five case studies on current and potential land use conflicts and encroachment potential within the studied localities.

SEATTLE/FAST CORRIDOR

Similar to Chicago's CREATE initiative, the Freight Action Strategy for the Everett-Seattle-Tacoma Corridor ("FAST Corridor") project is a coalition of public and private entities whose purpose is to improve the freight network of the Puget Sound area. It consists of the Washington State DOT, Puget Sound Regional Council (which currently oversees the project), cities and counties within the region, ports, Class I railroads BNSF and Union Pacific, trucking interests, and other local/state/federal agencies.²⁴ Unlike Chicago's effort, the FAST Corridor focuses on

²⁰ *Id.* p. 105. ²¹ *Id.* p. 43.

²² *Id.* p. 72.

http://www.atlantaregional.com/html/1767.aspx.

²⁴ A full list of participants can be found at http://www.psrc.org/transportation/freight/fast/fast-partners/.



both rail and roadway improvements separately and jointly, especially those tied to port land access and at-grade rail and road separation. Like CREATE, the FAST Corridor project does not involve policy adjustment or influence, but it does work to "sustain the maritime international trade corridor" though the area.²⁵

The project was spawned from the Regional Freight Mobility Roundtable, which itself is an informal public-private partnership of government, freight companies, and major industrial shippers within the Puget Sound region. The roundtable meets bi-monthly to listen to and discuss freight issues and topics for the region, and is often consulted by the FAST Corridor group for insight.²⁶

As noted earlier, the FAST Corridor is strikingly similar to Chicago's CREATE effort. Like CREATE, it does not attempt to influence policy matters other than pushing for system improvements to be funded and approved. It is primarily concerned with upgrading the Puget Sound area's highway and railroad systems that provide access to and from area ports, along with external trade connections to those ports. This is done primarily through at-grade separation, street expansion, and new highway construction. It serves as a means to bring public and private entities together to create understanding of the area's needs and what projects could be developed to meet those needs.²⁷

Because the focus of the project is so specific, its influence on preventing future conflicts with the Puget Sound region's freight network is limited. The effort mainly serves to improve access to ports and other freight facilities, increase efficiency of the system, and reduce congestion within the area. The latter goal, and the public-private nature of the project's operation, is the noteworthy aspect for the NCFRP 24 effort. The specific focus on freight operations and desire to improve existing freight corridors acts as a means to preserving freight infrastructure, if only for the immediate future. However, as noted previously, there is no ability to ensure that future conflicts in terms of land use and incompatible coexistence will not arise, as this is outside the scope and ability of the group. Such responsibility would rest with assigned planning agencies to advance and local governments to execute.

Regional Freight Mobility Roundtable

The Regional Freight Mobility Roundtable is an interesting coalition compared to some of the other public-private coops presented. It is relatively informal, with no overarching agenda other than to bring the public and private sectors together and to keep all freight stakeholders informed as to ongoing activities within the area. It also services as a reference point for parties interested in freight projects and concerns, as the roundtable incorporates the many players within the freight arena into a single point of contact.

²⁵ FAST Corridor. (2006, April). FAST Corridor Keeps the Puget Sound Gateway Open. In FAST Corridor (p. 2) [Brochure]. Retrieved from http://www.psrc.org/assets/1833/fastbrochure.pdf. ²⁶ http://www.psrc.org/about/advisory/roundtable/.

²⁷ http://www.psrc.org/transportation/freight/.



As mentioned earlier, the group meets bi-monthly and often hears presentations and discusses efforts currently underway within the region. Their section of the website contains their agendas and meeting minutes, along with the presentations given at each meeting. This can be a useful search point to see what the pressing transportation and freight issues are for the region at the moment.²⁸

Although informal, having an established coalition of major public and private sector players appears to effectively compliment project-orientated partnerships like the FAST Corridor and CREATE. Project-specific coalitions prove effective in achieving particular goals, but a permanent roundtable may prove to be more effective in the long-run to ensure that stakeholders are on the same page in terms of all transportation and freight issues. Additionally, it provides a single point of contact that can be accessed for input and influence when it comes to regional freight concerns. Being independent of specific projects underway helps ensure the longevity of the relationships between the involved parties.

Conclusions from Review of Initiatives

It is evident from the initiatives reviewed that the degree and type of freight-awareness, and action upon that awareness, vary substantially from region to region. Although not all the initiatives are completely focused on encroachment prevention and freight network preservation, all have in some way contributed helpful approaches and partnership examples that at least provide a base for further advancements in freight-aware planning. Though each studied region faces unique circumstances, the various initiatives provide valuable insights regardless of specific locations. Providing a list of initiative types with descriptions and references to successful examples would likely be useful for a website promoting efforts to prevent encroachment upon freight facilities and to preserve freight networks.

Additionally, based on a compilation of information found throughout the various documents and reports accessed for our review, the various initiatives and the planning organizations involved need to improve upon the packaging and distribution of the data they collect and the recommendations they propose. A better working relationship between public-private partnerships, MPOs, and local governments will ensure that each entity is on the same page and assist the decision makers (local governments) in being able to consider the big picture of a region's needs.

 $^{^{28}\} http://www.psrc.org/about/advisory/roundtable/roundtablepast/.$