Table of Contents

4.0 Stakeholder Outreach 4-1
4.1 Outreach Mechanisms 4-2
4.2 Needs and Deficiencies 4-5
4.3 Needed Improvements 4-25
4.4 Trends 4-35
4.5 Funding Options 4-39
4.6 Policies Affecting Freight and Local Issues 4-43
4.7 Workforce Issues 4-49

Appendix A: Stakeholder Interview Summaries
Appendix B: Stakeholder Interview Guides
Appendix C: Survey

List of Tables

Table 4.1 CMAP Regional Freight Planning Recommendations Study Interviewees 4-3

List of Figures

Figure 4.1 Shipment Origins and Destinations 4-4
Figure 4.2 Regional Freight System Adequacy 4-8
Figure 4.3 Trucking Improvement Needs 4-13
Figure 4.4 Rail/Intermodal Freight Needs 4-17
Figure 4.5 Water Freight Needs 4-21
Figure 4.6 Air Cargo Needs 4-23
Figure 4.7 Importance of Potential Trucking Improvements 4-27
Figure 4.8 Importance of Potential Rail/Intermodal Improvements 4-29
Figure 4.9 Importance of Water Freight Improvements 4-31
Figure 4.10 Importance of Potential Air Cargo Improvements 4-34
Figure 4.11 Highway Funding Options 4-40
Figure 4.12 Freight Funding Options 4-41
Figure 4.13 Land Use Impacts on Business 4-45
Figure 4.14 Community Freight Considerations 4-46
Figure 4.15 Community Freight Planning 4-47
Figure 4.16 Workforce Issues 4-50

4.0 Stakeholder Outreach

Identifying the needs of the freight system was a two-part process. First, regional freight stakeholders were consulted in order to identify deficiencies from the perspective of the user. Second, a data analysis was conducted to identify deficiencies in a systematic and data-driven fashion. This section describes the stakeholder effort. The data analysis is described in Section 5.

In order to identify the needs of the freight system and the potential improvements that could be undertaken (through infrastructure projects, operational enhancements, and policy options), regional freight stakeholders were consulted. Representatives of the trucking, rail, maritime, and aviation modes were interviewed, along with community planners and key decision-makers, such as the CMAP Council of Mayors Executive Committee. In addition to individual and group interviews, an electronic survey was distributed widely to various private and public sector stakeholders. The 74 responses also contributed to identifying potential improvements. Detailed outreach summaries can be found in Appendix A.

Most stakeholders feel that Chicago will continue to be a major freight hub into the future. Chicago is the only U.S. location where all six Class I railroads intersect, which is one key driver of regional freight activity. O'Hare's prominence as a major international and national air gateway is a critical factor. The network of major interstates (e.g., I-55, I-57, I-80, I-88, I-90, and I-94) through Chicago provides excellent access via highway throughout the region and to other North American locations for trucking carriers. The inland waterway network and Great Lakes provide options for river barge and short sea shipping.

Some of issues raised by the key stakeholder groups are summarized below:

- **Trucking stakeholders** felt the key issues on the highways include urban area congestion, construction and construction zone management, local restrictions on delivery times, and a lack of convenient truck parking options. They recommended solutions such as better advanced traveler information and travel demand management strategies, improved construction zone management, policies to encourage nighttime deliveries, and location of new truck parking facilities. Stakeholders showed strong opposition to increased tolling as a funding mechanism, feeling they already pay more than their share.
- **Railroad and intermodal stakeholders** anticipate significant growth in intermodal traffic, longer trains, and greater innovation in freight exchange coordination and tracking. This growth will be accompanied by increasing conflict between passenger and rail traffic, however, given the difficulty of expanding rail infrastructure in the heavily urbanized region. They showed strong support for CREATE and urge coordination

among regional and local governments to address issues of potential conflict, such as quiet zones and highway-grade crossing delays and safety concerns. They also showed a high level of appreciation for CMAP's inclusive rail planning efforts.

- **Maritime stakeholders** operating on inland waterways as well as Lake Michigan believe poor lock reliability, inadequate dredging, and restrictive land use ordinances are the key challenges facing their industry. There is significant concern over the fish barrier on the Chicago Sanitary and Ship Canal and stakeholders would like to see greater modal connectivity to take advantage of available maritime capacity.
- **Aviation stakeholders** are eager for improved access to Chicago O'Hare Airport and more streamlined and less burdensome security protocol. They would like to see projects which improve O'Hare access, such as an internal freightway or restricted perimeter roadways, and/or elimination of some of the critical bottlenecks surrounding O'Hare. The industry is anticipating increasing traffic at other airports as well as the possibility that a Peotone Airport may lead to an efficient air cargo cluster, taking advantage of available land, access to I-80, and nearby intermodal facilities.
- **Municipal and regional planners and decision-makers** showed concern over land use conflicts in smaller communities. The location of freight facilities on the outskirts of the region has profoundly impacted regional traffic patterns and drawn significant volumes of truck traffic to previously rural areas. Increasing rail volumes and anticipated changes in operation (such as the acquisition of the EJ&E rail line by CN) generate concern over delay and safety conflicts at highway-rail grade crossings. Stakeholders feel that greater attention to freight through community planning can be achieved.

The following section describes these findings and their sources in greater detail.

4.1 OUTREACH MECHANISMS

Individual and Group Interviews

This memorandum incorporates data collected via three group and 11 individual interviews between July and September 2009. Additionally, stakeholder input collected via 25 interviews for the South Suburban Freight Study in 2007 was considered. The three group interviews were with the Illinois Trucking Association members, Illinois Water Carriers Association members, and the Chicago Metropolitan Agency for Planning (CMAP) Council of Mayors Executive Committee. The remainder of interviews involved one or two representatives of each agency or organization. Interviewees were targeted to gather input from all four modes of freight transportation: truck, air, water, and

rail. While it is often challenging to receive input from private businesses, this study secured input from those that ship materials or products in Greater Chicago. Agencies interviewed are shown in Table 4.1.

Table 4.1 CMAP Regional Freight Planning Recommendations Study Interviewees

Mode/Sector	Company/Agency	Participant/Industry Details	Number of Participants
Air	International Air Cargo Association President		1
Air	Chicago Air Cargo Managers Association President		1
Business	DeLong Corporation	Grain	1
Business	Prairie Creek	Grain	1
Business	Shure	Electronics	2
Business	LaFarge Cement	Aggregates	1
Local Government	Council of Mayors Executive Committee of Chicago Metropolitan Agency for Planning		16
Rail	Norfolk Southern		1
Rail	Union Pacific		2
Truck	Illinois Trucking Association –	Dominick's, Edy-Brown, Superior Bulk Logistics, Packard Transport, Inc., Kingsway Logistics, Ideal Delivery Services	6
Water	Illinois International Port District		1
Water	American River Transportation Company, subsidiary of Archer Daniels Midland		1
Water	Illinois River Carriers Association	Ozinga, AEP River Operations, Florida Marine Transporters, Hanson Material Service, Calumet River Fleeting	6
Water	Lake Carriers Association		1

Source: Cambridge Systematics

Electronic Survey Respondents

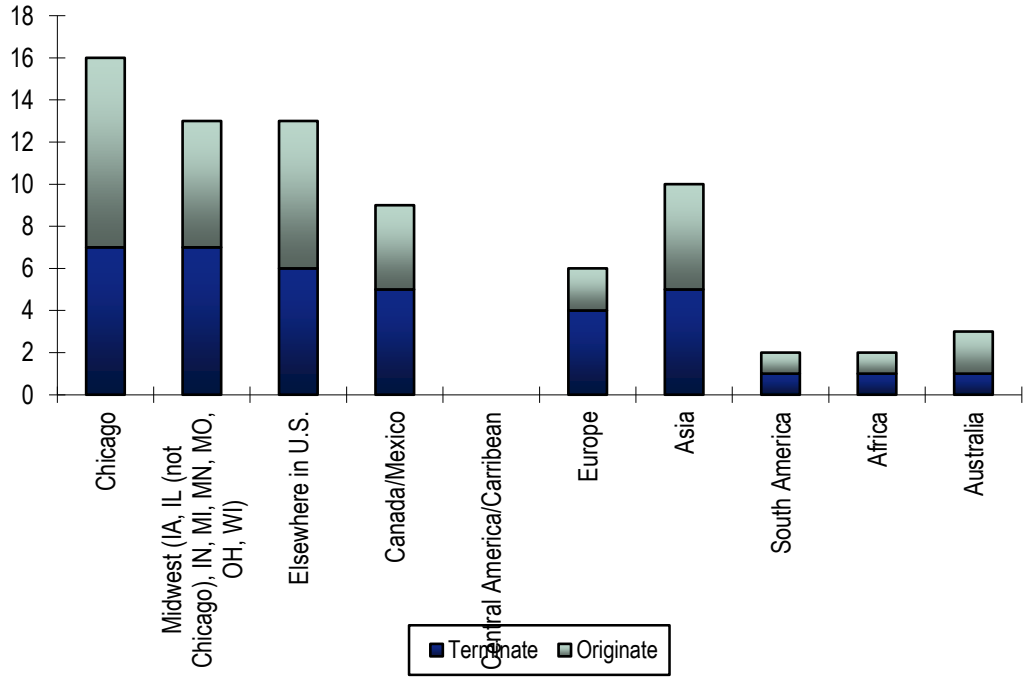
Input from a wider audience of freight system users was collected via a user-friendly web-based survey between July and early October 2009. The electronic

survey was publicized via CMAP's study website and weekly newsletter, as well as through distribution to regional freight-oriented groups and business and logistics professional organizations. Public- and private-sector survey participants were asked about system needs and deficiencies on the four modes, needed improvements, freight policies, funding options, workforce issues, and land use issues. Private sector respondents also were asked about shipping patterns and business trends. Public sector respondents also were asked about community planning for freight. The survey questions can be found in Appendix B.

Input was gathered via 74 electronic surveys. Of the respondents to the electronic survey, 43 percent were from the private sector, 38 percent were from the public sector, and 18 percent were from the non-profit sector.

Figure 4.1 shows the breakdown of the 11 private sector responses in terms of origins and destinations of goods. Nine of the respondents originate goods in Chicago and seven terminate goods in Chicago. Most ship in the Midwest and elsewhere in the U.S. Asia is another major origin and destination.

Figure 4.1 Shipment Origins and Destinations



Twenty-five public sector representatives participated in the electronic survey. Nearly half of the public sector electronic survey respondents were transportation planners or engineers. Respondents also included community planners, elected or appointed officials, and economic development staff.

Respondents represented municipal, regional, state, and national organizations. See Appendix C for a detailed breakdown of respondent agencies and roles.

4.2 NEEDS AND DEFICIENCIES

Overall, survey respondents feel that Chicago's freight system meets their needs moderately well, rating it an average of 6.1 out of 10. The average rating by 20 private sector respondents was slightly lower at 5.6. Public sector respondents view the system slightly more favorably, scoring it a 6.5 on a 10-point scale.

By mode, the air freight system fared the best and the roadway and water freight systems received the lowest ratings. Private sector respondents feel that air and roadway systems more effectively meet needs and that the water and roadway systems were less effective. Among public sector respondents, the modal systems were scored similarly, all rated between 5.7 and 6.8 out of 10 points. Figure 4.2 shows the average rating of the regional freight system by all survey respondents, as well as averages of the public and private sector responses.

Chicago Region Freight Strengths

Most stakeholders feel that Chicago will continue to be a major freight hub into the future. Chicago's location as a historical hub, convergence of the Class I railroads, the interstate network, and the geography of Lake Michigan forcing freight through the area all point to the region's sustained role in regional, national and international goods movement.

Chicago is the only U.S. location where all six Class I railroads intersect, which is one key driver of regional freight activity. The railroad hub status also limits the extent to which other regions can compete with Chicago, particularly in terms of the potential for rail freight transfers between the eastern (CSX, Norfolk Southern), western (Union Pacific, Burlington Northern Santa Fe Railway), and Canadian (Canadian National, Canadian Pacific) railroads.

O'Hare's prominence as a major international and national air gateway is another critical factor supporting Chicago's freight status. One strength is that air cargo representatives feel Customs Port Chicago is the most business-supportive customs port in the Midwest. It is viewed more positively by the air freight industry than other airports such as Cincinnati, Detroit, Miami and JFK. The air cargo industry feels customs in Chicago is very pro-business, responsive, and considers air cargo businesses to be customers.

Hundreds of freight forwarders and third-party logistics firms are clustered around O'Hare and depend on the high volumes of freight moving through the airport and the region to offer competitive rates to customers. Third-party logistics firms also ship customers' freight via other modes in the region, using rail/intermodal centers in Will County and the extensive highway network.

The network of major interstates (e.g., I-55, I-57, I-80, I-88, I-90, and I-94) through Chicago provides excellent access via highway throughout the region and to

other North American locations for trucking carriers. The highways are also critical to transfers between modes within the region.

Stakeholders were asked to identify other cities they feel have freight systems that are competitive with that of Chicago. Cities identified as competitive with Chicago, in approximate order of number of mentions, include:

- Memphis;
- Los Angeles;
- New York;
- Atlanta;
- St. Louis;
- New Orleans;
- Long Beach;
- Philadelphia; and
- Seattle/Tacoma

Respondents were also asked to identify cities viewed as having freight systems superior to that of Chicago. Regions viewed as superior, in approximate order of the number of mentions, include:

- Dallas;
- Detroit;
- Atlanta;
- Kansas City;
- Columbus;
- Minneapolis;
- Memphis;
- Cincinnati;
- Long Beach; and
- Halifax, Nova Scotia.

General Community Impacts

Significant freight system development in the region has been underway in recent years, with much of the activity concentrated in South Cook and Will Counties. These developments include intermodal terminals and warehouse and distribution centers. While a fairly significant planning process is undertaken for each major intermodal facility (e.g., Logistics Park Chicago in Elwood),

development of ancillary warehouse and distribution facilities pursued by municipalities is not well coordinated.

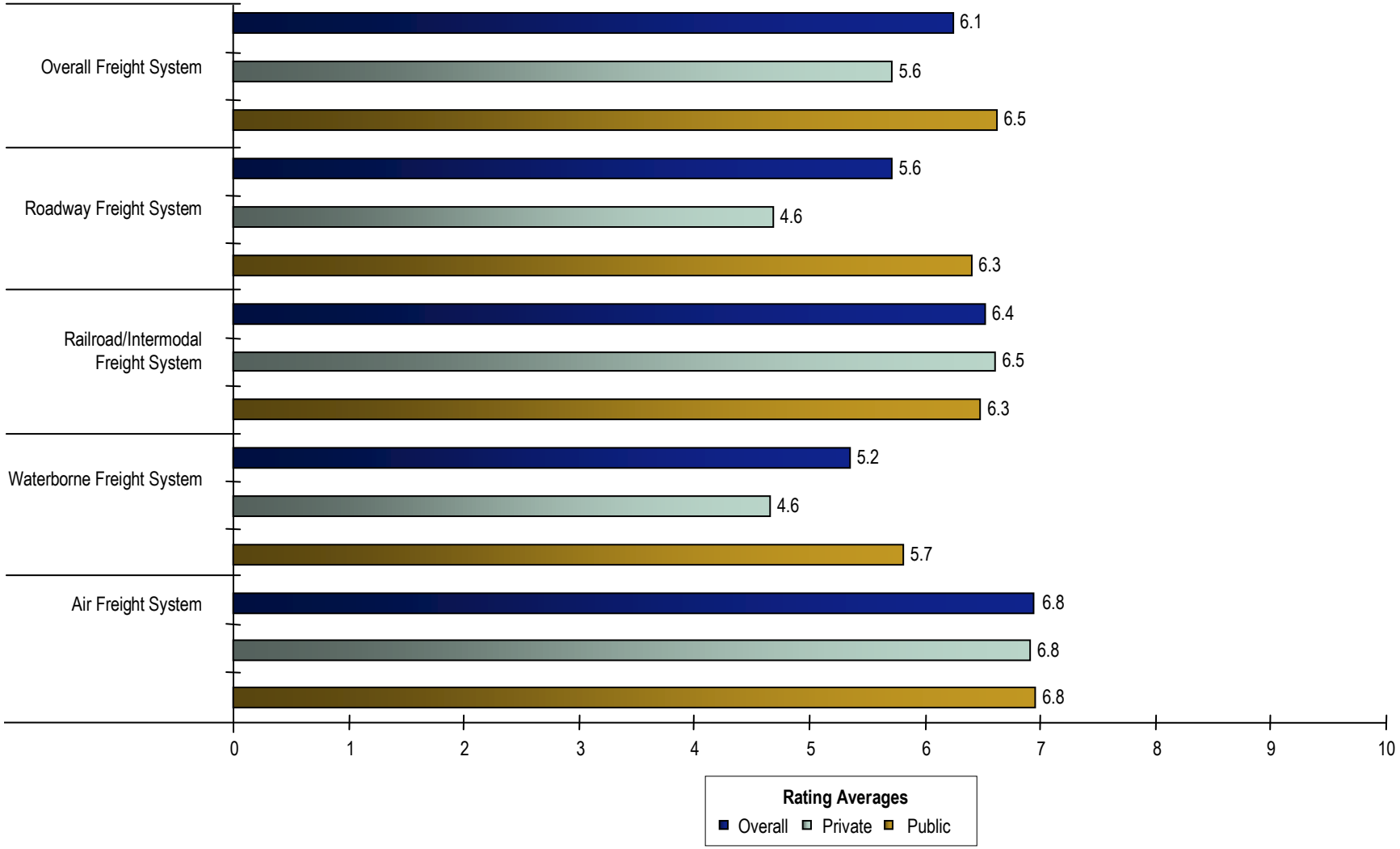
The locations of these logistics centers on the outskirts of the region was chosen to avoid urban congestion. However these freight facility locations have profoundly impacted regional traffic patterns and drawn significant volumes of truck traffic to previously rural areas. Roadway circulation around these facilities is often not sufficiently considered. Planning for the large number of individual developments and transportation connections is not being coordinated regionally, which is resulting in concerns about the cumulative impacts of these developments.

Land use conflicts have resulted between freight-oriented and residential development. While mitigation efforts are generally planned as part of major intermodal facilities, residential areas may be located nearby such facilities resulting in impacts such as traffic congestion, noise, and light.

The Southland has strongly embraced freight and logistics-oriented development. However, some communities have expressed concern about whether the local economy will be sufficiently diversified if its economic development strategy is too closely tied only to this industry.

With the acquisition of the EJ&E rail line by CN, increased freight flows are anticipated along the EJ&E corridor. Communities along that corridor are concerned about increased freight train volumes and the impact particularly at highway-rail grade crossings. Additionally, communities struggle with the aesthetic appearance of rail viaducts and their impact on community livability.

Figure 4.2 Regional Freight System Adequacy



Note: Responses – 20 Private, 30 Public.

Trucking

Given the economic conditions in 2009 and the sharp decrease in shipment volumes, trucking companies are struggling and many have been going out of business. In 2008, 3,000 companies with five or more trucks went out of business nationwide, according to the Illinois Trucking Association (ITA). Challenges to trucking efficiency are brought into even greater relief when they may impact whether a company can remain in business during difficult economic times. Trucking needs and deficiencies are discussed below.

Delivery Time Restrictions

Restrictions on delivery times by municipalities are one of the most significant issues impacting efficiency of trucking in the region. Many municipalities restrict deliveries by trucks during the evening hours, (e.g., 10 p.m. to 6:30 a.m.) and curfews vary by municipality, severely impacting trucking schedules and cost. In many cases, truckers feel these curfews are unnecessary as many of the delivery locations (such as Dominick's store locations) are not adjacent to residential development, or efforts have been made to mitigate noise from truck deliveries. For example, the trucking industry notes stores such as Target or Walgreens are open 24-hours per day to serve customers but restrict deliveries during one third of each 24-hour cycle.

Delivery time restrictions can have safety impacts in that they require trucks to operate during the most congested periods of the day, increasing the potential for conflict between trucks and autos. Trucks also are forced to conduct some of their heaviest operations when schools are in session. For example, delivery time restrictions force drivers to deliver to a Walgreens near a high school during early morning hours, so they must maneuver around heavy traffic and high school children crossing the street.

Delivery time restrictions lead to higher costs in tolls. When truckers are forced to operate on tolled roadways during peak periods when truck tolls are higher, this results in higher operating costs for trucking companies. While the tolling policies are intended to provide incentives for trucks to operate at off-peak hours, they are unable to do so due to local delivery time restrictions. ITA member Eby-Brown estimates their monthly toll cost at $11,000. Additionally, if trucking companies could make deliveries 24 hours per day, they could use fewer trucks and fewer staff more efficiently, which would reduce costs. Trucking companies indicate strong willingness to have drivers operate during nighttime hours. In addition to municipal delivery time restrictions, operating time restrictions are in place on some truck routes such as IL 47 (e.g., no vehicles over 54,000 pounds are permitted to operate between 11 p.m. and 3 a.m.) Such policies further complicate where and when trucks are able to operate.

Construction Zone Management

Construction zone management is a significant frustration for the trucking industry. During construction periods highway lanes are often blocked and speed limits are reduced (e.g., to 45 mph) even during periods when work is not being performed. If lane restrictions were limited only to periods of active construction, traffic congestion could be reduced. Additionally, construction often results in lane closures along long stretches of roadway while shorter closures might be sufficient. Truckers need better real-time information on construction delays, particularly in advance of bottlenecks so routing decisions can be adjusted.

Truck Parking

A lack of truck parking in the Chicago region is a significant problem. The truck parking deficit is particularly problematic when truckers face restrictions on delivery times but cannot find a place to stop near the delivery site. Lack of parking can result in forcing drivers to operate during congested periods and while fatigued. The most efficient process is for truckers to park and stage their deliveries near the final delivery location so they are sure to make their delivery window and can avoid driving during peak congestion. However, due to lack of facilities truckers often must park at the perimeter of the region and drive during peak congestion to meet delivery time windows. Truck parking was also mentioned as a need by the air cargo industry representative, as trucks provide a vital link between airports and warehousing and distribution centers. Truck parking is needed in the O'Hare area; no facilities currently exist.

ITA unsuccessfully advocated that the Illinois Tollway install a rest area before the first toll collection location (e.g., on I-94 near the WI/IL border) so drivers were not forced to pay peak-period tolls necessary to reach the Lake Forest rest area. Interviewees believe trucks are frequently viewed as undesirable by municipalities, and they face "Not In My Back Yard" (NIMBY) obstacles to locating new parking sites.

In areas around major intermodal facilities, facilities for truckers to do paperwork or repair equipment may not be considered, resulting in trucks parking along the roadside and tearing up the parkway. This is an issue around Logistics Park Chicago in Elwood. Also in areas with growing freight development, while municipalities are eager to attract warehouse and distribution facilities, they do not want the trucks that come with them and have made it more difficult to establish truck terminals. Terminals near the ramp allow drayage firms to offer lower rates than if based remotely.

Congestion

Delays due to congestion from incidents, excess traffic, and construction have multiple impacts on the cost of doing business for trucking companies. Freight system users note congestion is a major issue particularly on Interstate 55 and in

the Chicago Loop. Costs resulting from congestion delays include: fines for missing tight delivery windows, truckers running out of time they are permitted to drive before required rest under hours of service (HOS) regulations, and negative impacts on the supply chain (e.g., negative impacts on other businesses that need the materials or products they are delivering). Missed delivery times can significantly impact trucking companies through hefty fines and loss of contracts. For example, Eby-Brown is contractually bound to make deliveries within a two-hour window, and failure to meet this window 97 percent of the time within a given month results in financial penalties. Difficulty in predicting operating times can also impact oversize-overweight permits, which sometimes expire during a delayed trip.

Weight Restrictions

Local weight regulations are problematic for truckers as they impact routing and may result in longer routes. Truckers feel weight regulations should be a uniform 80,000 pounds for state highways. Interviewees felt it is unfair for municipalities to charge for local permits in addition to the State's overweight permit costs. Truckers cited the example of law enforcement in Harvey ticketing truck drivers entering and exiting Union Pacific's Gateway Intermodal Terminal due to trucks exceeding weight limits in that jurisdiction.

Local communities recognize variations in weight restrictions are a problematic issue. The variations among municipalities result in a "checkerboard" of regulation that truckers must navigate, resulting in some communities getting a disproportionate volumes of truck traffic. Communities without home rule must adhere to IDOT guidelines while those with home rule may enact their own ordinances.

Overweight permits are a significant issue for some shippers and carriers, particularly depending on where they operate in the region. The State overweight permit cost is $250 per truck per quarter, but Will County overweight permits required to enter Logistics Park Chicago (LPC) are more expensive ($20 per container) and the local permits required for Elwood Village are much more expensive ($750 per truck per month). According to DeLong Company, which ships grain via containers, the total cost averages out to $40-50 per container, 95 percent of which goes to local and county coffers. LPC is probably one of the largest inland intermodal centers in the world, but the cost of transporting goods there is sometimes prohibitive. Rochelle and Global II were cited as being much less expensive to enter as they are accessible via state roads and additional overweight permits are not needed. DeLong sees the costs of permits as a major inhibitor to agricultural business in Illinois.

Other Issues

The trucking industry feel trucks should be allowed on express lanes on the Dan Ryan Expressway given that they comprise through traffic. It does not seem productive to force truckers onto local lanes where more weaving and exiting

traffic movements occur, particularly when the trucks are operating as through traffic. Truckers feel that poor information exists about regulations, particularly where trucks can legally operate (i.e., express or local lanes), and travel conditions for over-the-road truckers.

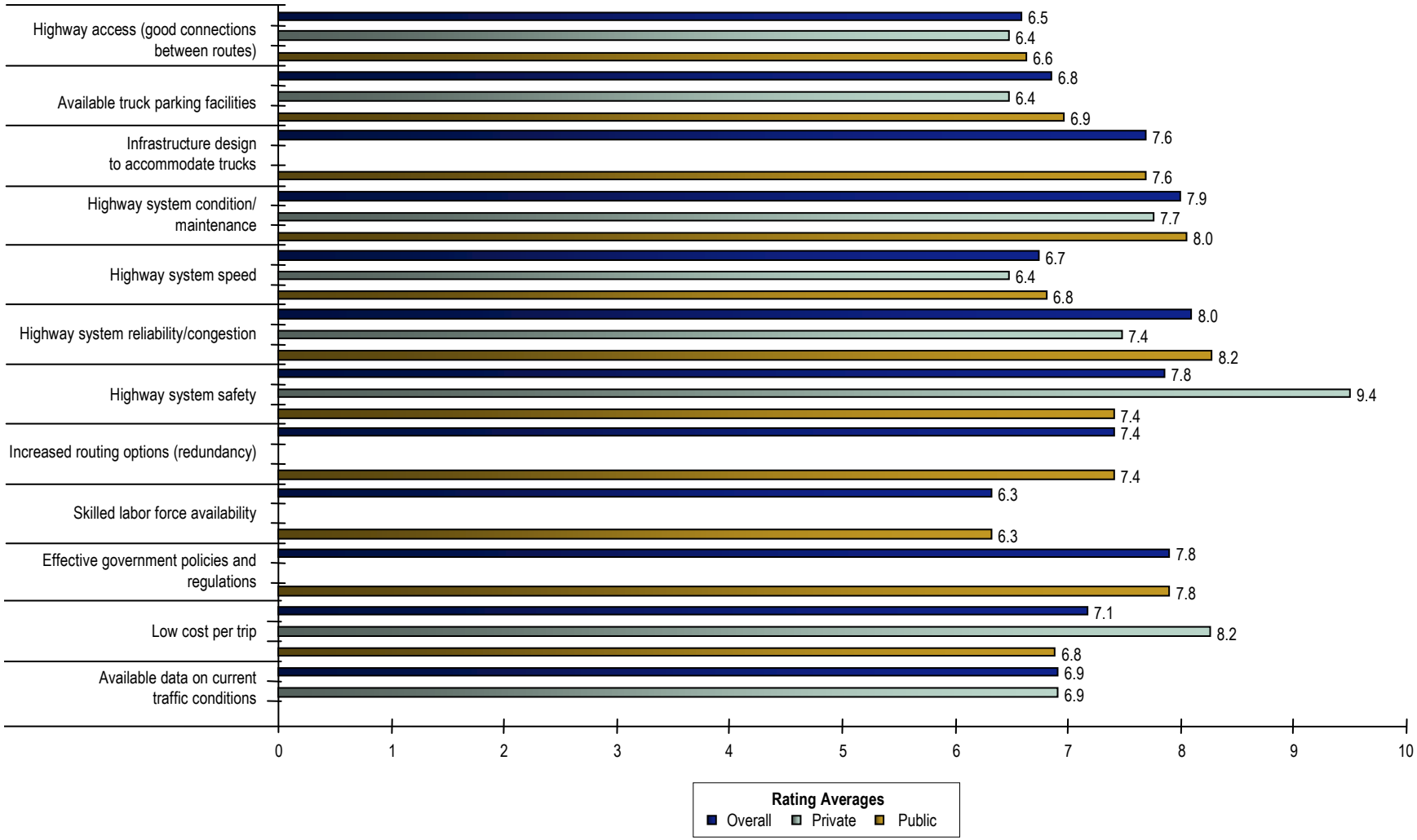
Truckers are not supportive of differential speed limits, which allow cars to go higher speeds (e.g., 65 mph) while restricting trucks to lower speeds (e.g., 55 mph). While Illinois just passed a new 65 mph speed limit for trucks that will take effect on January 1, 2010, the higher speed limit will apply only on interstates in nonurban areas and not in Cook County or the five surrounding collar counties. It also will not be in effect on interstates with lower speed restrictions.

One respondent stated that dependence on diesel fuel is too high, and green fuel systems should be considered to power freight movement, e.g., natural gas.

Survey respondents indicated traffic safety is the greatest trucking factor needing improvement, as shown in Figure 4.3. Operating costs and highway system maintenance are also important issues. Interviewees noted that potholes and poorly maintained pavement can damage trucks and impact safety. Intersections that handle large volumes of truck traffic with poorly maintained pavement and potential safety issues include Arsenal Road at I-55.

Among the public sector survey respondents, the most significant issue was traffic congestion. Highway system condition and maintenance was also a major concern.

Figure 4.3 Trucking Improvement Needs



Note: Responses – 7 Private, 26 Public.

Rail/Intermodal

Local Community Considerations

Freight rail traffic passes through many communities in the region, and more than 1,500 at-grade rail crossings exist. Train whistle-blowing has a negative impact on local communities. Because Federal Regulations govern whistle blowing by trains, local jurisdictions have no power to pass local ordinances. Because local jurisdictions that request this designation must pay for safety improvements at crossings, it is expensive to make quiet zones a reality. In the past, railroads have proposed medians to prevent cars from driving around gates and onto tracks when gates are down but these may create local access problems, particularly with driveways within 150 feet of crossings.

Viaduct maintenance is a concern of local jurisdictions. Viaduct aesthetics (e.g., peeling paint and visible deterioration) have an impact on community livability. While communities trust that railroads conduct inspections and that viaducts are operationally safe, to community residents they do not "look safe." Narrow viaducts also can create bottlenecks on the roadways passing under them.

Truck congestion and roadway impacts need to be considered and mitigated around the Elwood Logistics Park Chicago and the future Joliet facility serving UP.

Rail impacts such as conflict at grade crossings are a major concern. This issue received the highest rating for improvement needs in the survey (see Figure 2.3) Metropolitan Mayors Caucus recently made the decision (September 2009) to begin identifying rail-related needs and deficiencies for a future "CREATE Phase II." The goal is to develop a detailed inventory of rail issues throughout the 7-county region, beyond those in the current CREATE program, which is largely focused on Cook County.

Rail Operations Challenges

Chicago is a major hub for rail cargo transfer. Ability to move goods swiftly through the region on rail was one of the top needs expressed by survey respondents (see Figure 4.4). The rail carriers indicate that the most pressing infrastructure needs to improve rail operations have been identified via the CREATE Program. However, carriers note that exchange of traffic between rail lines is difficult, and scheduling problems and back-ups are frequent. The Belt Railway Company (BRC), which is owned by all Class I railroads, allows railroads to exchange whole trains, but railroads frequently run into issues of not having a crew prepared to receive a train. The BRC has recently instituted a policy that the receiver must have facilities and crew available before a train to be transferred to them is allowed to get on the BRC.

In response to this challenge, Union Pacific led development of the rail business exchange, put in place six months ago, which allows command centers to input

train and crew location and availability to coordinate cargo and train transfer. All Class I railroads participate and this has proven to be a significant help. Railroad stakeholders see this as reflective of a general shift in rail attitude towards increased coordination for mutual benefit.

Urban Barriers to Growth

Norfolk Southern facilities are primarily located within the City of Chicago, where limited land is available for growth. An additional restriction is that any new developments within Chicago need to be elevated as no new at-grade crossings are permitted. Therefore NS is increasing efficiency of operations by automating gates at its intermodal facilities to enable more trucks to be processed more quickly at those locations and to reduce staff costs. Truckers often race to meet cutoff times for train loads to maximize their loads, and one of the benefits of the automated gates is more assurance to shippers that their loads can enter the gate in a timely fashion. While maintenance of intermodal connectors is important, it is not a primary concern of rail companies, which tend to worry about freight once it arrives at the gate.

Passenger/Freight Conflicts

Conflicts between freight and passenger trains are a significant issue in Chicago, and have the potential to constrain freight growth. Most passenger trains (Metra commuter rail and Amtrak intercity rail) operate on rail lines owned by freight rail companies. The Midwest Regional Rail Initiative to add high-speed rail service throughout the Midwest, with Chicago as the hub, could generate additional freight/passenger conflicts unless needed infrastructure improvements are made. Event absent new passenger service implementation, passenger demand has been rising steadily. Until the economic downturn, freight rail demand also was rising, and is expected to recover in the future.

Rail/Intermodal Reliability

Travel time and reliability are key considerations for shippers, which impact the modes selected. For example Shure, which manufactures high-end electronics in Mexico and has a distribution facility in Wheeling, has considered shipping via intermodal (truck on rail) from El Paso to Chicago but shipment times and reliability are factors that can make trucking more competitive. Shure requires 48 hours for its high-value products to travel from El Paso to Chicago. The company currently uses team truck drivers who drive straight through. Via intermodal, the trip would take five days in transit plus recovery of cargo at the container yard and delivery. While pricing fluctuates due to market conditions, currently, the difference in price between truck and intermodal is not very great; (approximately 10 percent between truckload and intermodal).

Shure finds that rail offers fast service to the west coast but not fast service to the south. Shure has done intermodal shipments to Laredo that take 5 days and sometimes experience delays. From Los Angeles to Chicago on BNSF transit time

is four days. Currently, in the down economy, there are few delays. But in past years backlogs of 5 days have occurred in Kansas City, through which the route to Los Angeles passes. Rail stakeholders state, however, that when the rail mode is used "creatively" by shippers, rates can be reduced, service improved and carriers' margins increased so all parties benefit.

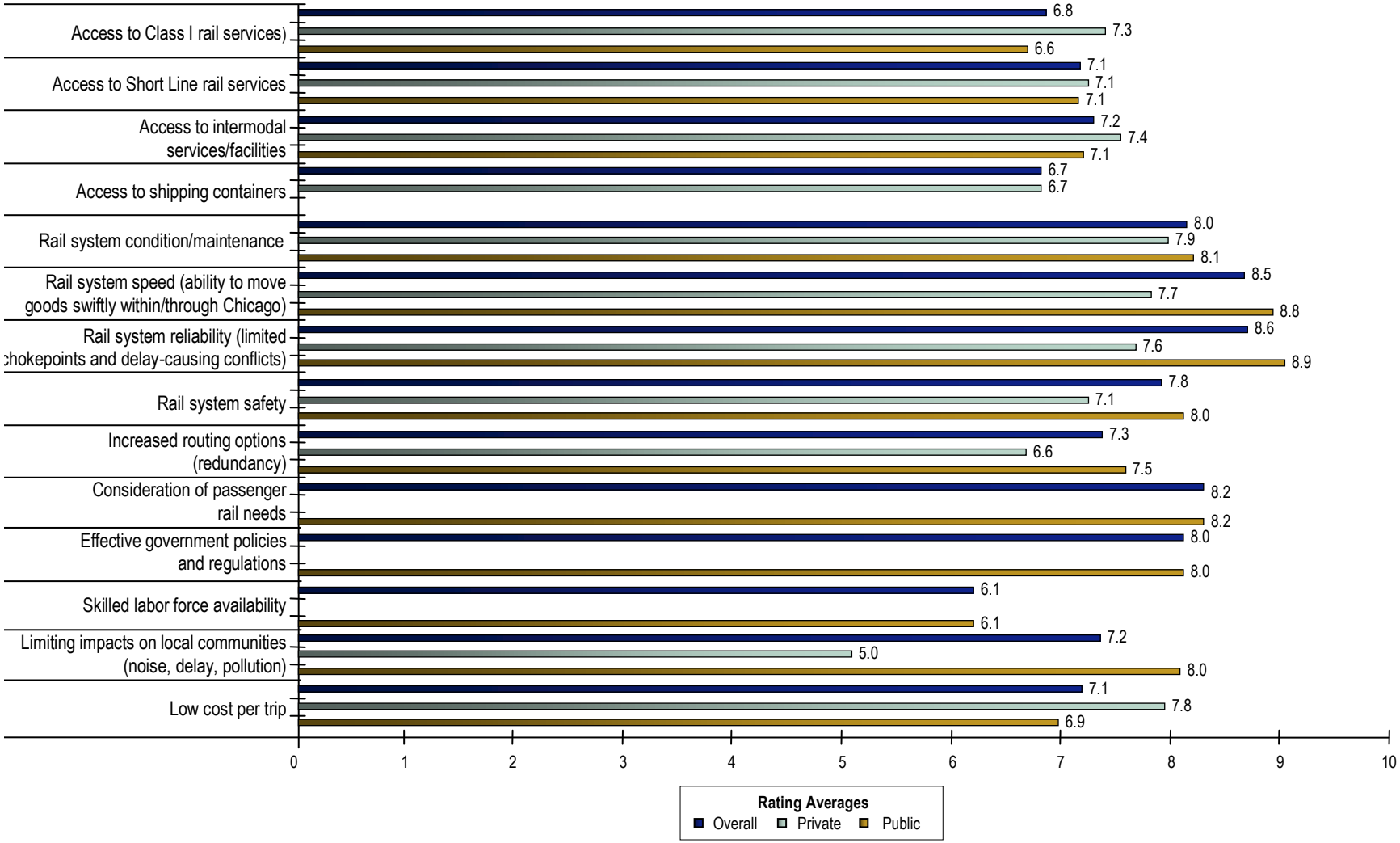
International Routing Considerations

While "on paper" transport of goods from international origins through Canada is less expensive (savings of $200 per container), customs problems often result and cause costs to rise. Whenever merchandise on a potential high-alert list (e.g., electronics from the Philippines or China) is imported or exported, customs flags the containers. Even for a certified importer, customs still frequently flags containers. In the worst case, customs conducts an intense exam that takes two extra days or costs $1,000 in handling fees. Therefore, some companies find shipping through Canada more expensive.

Regional Facility Location Impacts

Significant intermodal facility development has occurred in Will County. Additional locations are planned. From the shipper's perspective, the trend of intermodal facilities moving farther out from the urban center has added costs for shippers and adds lead time. For example, it takes a half day to retrieve a container from outlying intermodal facilities and transport it to the north side of Chicago.

Figure 4.4 Rail/Intermodal Freight Needs



Note: Responses: 8 Private Sector, 25 public sector.

Water

Water freight carriers operate from the Great Lakes via the Port of Chicago, which has facilities at Iroquois Landing and Lake Calumet. Inland waterways include the Sanitary and Ship Canal; the Cal Sag Channel; and the Calumet and Chicago Rivers, which ultimately connect to the Mississippi River and the Gulf Coast.

City of Chicago Issues

The City of Chicago presents several barriers to water freight industry growth and success. A City ordinance requires a buffer zone of 30 feet at the water's edge, which is designed to allow the city to develop riverwalks and other public amenities. However, this has a significant impact on water freight operations as cranes cannot operate with a 30-foot margin to the water. City of Chicago bridges have 19 to 20 foot clearance; barges operating within Chicago must have pilot houses that can lower from their standard operating height. There is an increase in the number of bridges that do not open in Chicago, partially to reduce impact on roadway congestion, which places further restrictions on industry. The city promotes residential development along waterways, which is often in conflict with industrial uses and goods movement.

Fish Barrier

On the Chicago Sanitary and Ship Canal, electrified fish barriers to prevent entry of invasive species (Asian Carp) into Lake Michigan have been installed and are in the testing stages. The barriers are located just north of Midwest Generation and south of the Romeo Road bridge in Romeoville. The U.S. Coast Guard (USCG) established a safety zone with regulated navigation in the area adjacent to and over the electrified fish barriers. (A temporary Final Rule was issued September 9, 2009 – see www.uscg.fishbarrierinfo.com) During Midwest Generation loading operations, vessels are required to be towed by a bow boat to ensure safe transit of the area and prevent contact with other vessels and potential sparking.

The U.S. Army Corps of Engineers (USACE) funded the use of bow boats to guide vessels through this area with the electrified fish barrier through September 2009, but future funding is undetermined and it is expected the industry will need to fund bow boats in FFY10 starting October 1, 2009. The cost of a bow boat is $700 per vessel tow. Approximately 7 vessels pass through this location per day currently, while under normal economic conditions traffic is usually 12-15 vessels per day through the nearby Lockport Lock. The cost to industry of $700 per vessel tow in this area, required due to USCG safety regulations, will place a major burden on industry when the USACE budget runs out to pay for this.

Lock Reliability

Decreasing reliability of locks is a significant issue for waterborne freight movement. The reliability of locks is decreasing as more failures are occurring due to deferred maintenance. Many river docks need just-in-time delivery. Delays that are many hours or even multiple days (e.g., those caused by the fish barrier) can result in a manufacturer running out of materials. For example, Ozingas cement operations at Armitage have materials for 24 hours and a delivery is required every day. Preventive maintenance of locks is a great need. The industry is moving toward developing a prioritized National Backlog of Maintenance list, given limited resources and the need to invest in projects of national and regional significance. Private sector survey respondents ranked maintenance as one of the top three needs for water freight (see Figure 4.5). While lock maintenance issues do not prevent connectivity to the Mississippi River and Gulf Coast, they can result in travel time delays.

Great Lakes Issues

The Lake Carriers Association states that the Great Lakes are facing a dredging crisis, stating that the USACE has not been properly funded for decades. On the Great Lakes more than 200 million cubic yards of sediment must be moved to get the system back to "project dimensions" (When Congress authorizes a Port or Waterway, and defines the width and depth of the navigation channel this is "project dimension.") In FY10 there is a need to remove almost a million cubic yards of sediment from the Great Lakes. Vessels lose cargo capacity when they have to lighten up due to clearance issues.

A second large lock is needed at Sault St. Marie, Michigan. Ships pass through this location to move from Lake Superior to other Great Lakes. Seventy percent of U.S. flag carrying capacity is restricted to the existing Poe Lock and cannot go through the other lock at the Soo Locks. While it is currently well maintained by USACE, if there is a failure of the Poe Lock (built in 1969) no redundancy exists. Congress has authorized building a second lock at full Federal expense. There has been a groundbreaking on the first step in the process, building coffer dams. However, the total cost of the new lock is $490 million dollars, and Congress has not appropriated that money yet.

More Coast Guard icebreakers are needed on the Great Lakes. Ice season starts in December and can extend through April. During ice cover periods ships can move cargo only if the Coast Guard breaks the ice. The USCG has 8 icebreakers on the Great Lakes, but only one is a modern vessel (built in 2006). Two vessels built in 2003 are not built to be icebreakers and are not very effective. In the spring of 2008, Lake Carrier Association members lost $1.3 million due to ice damage to vessels. In 2009 some companies delayed sailing until ice conditions could ease to avoid more vessel damage.

Modal Connectivity

Little connectivity exists between water and rail. For example, no water dock is located near the Logistics Park Chicago intermodal facility in Elwood. However the private sector ranks connectivity between water and rail as among the top three issues in the survey. The Port of Chicago does not have issues with Intermodal Connectors, and they do not feel that highway congestion is a big issue.

Other Issues

Along the Calumet River, there is no vacant land for industrial development. No large parcels near waterways are available for industrial development in proximity to Chicago

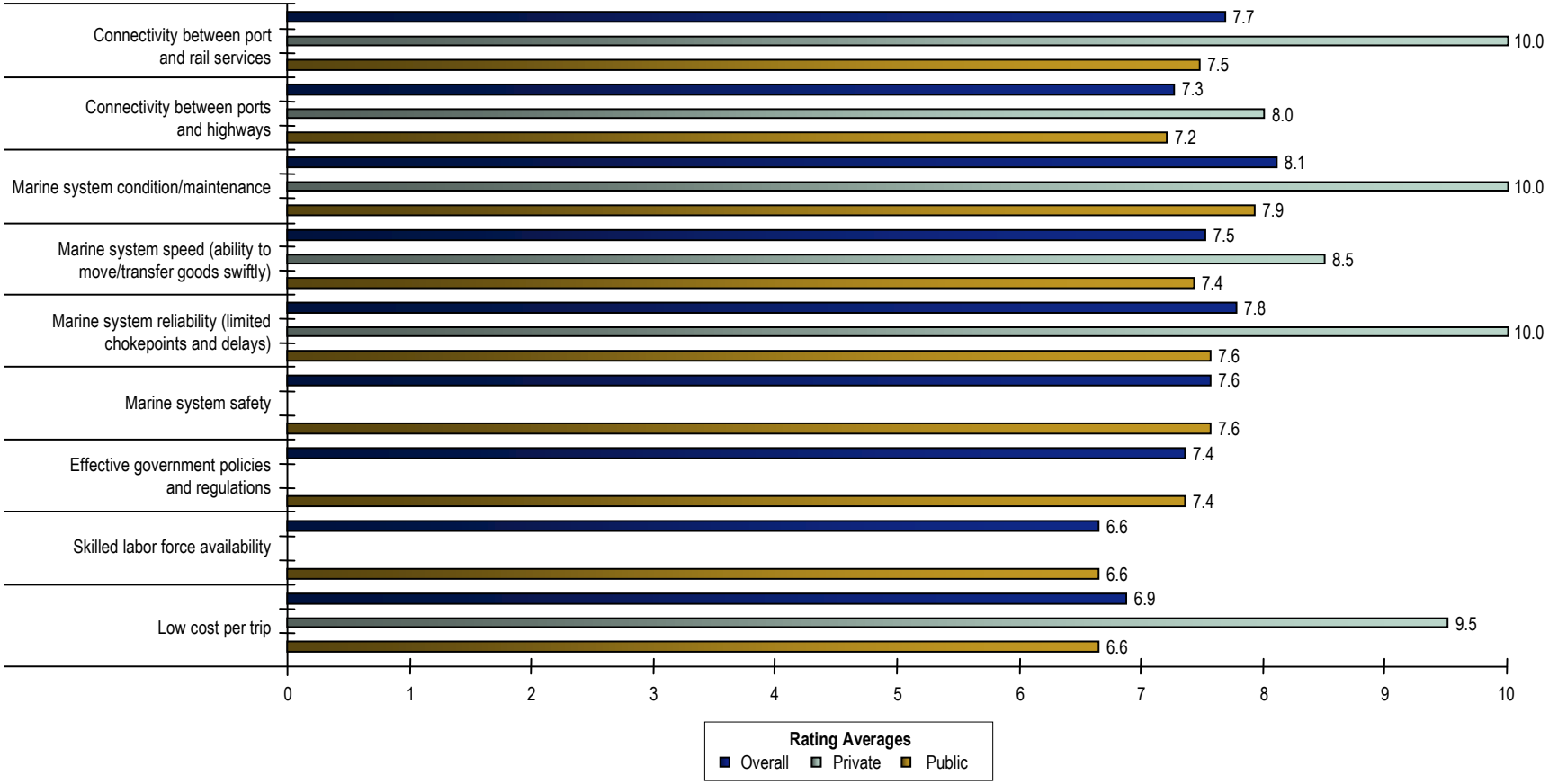
Fleeting (parking) areas for vessels are deficient. In Lemont there are 6-7 fleeting areas but no other fleeting areas north of Lemont.

Locks have 600 foot chambers but tows are 1,200 feet in length. There is a need to rebuild locks to accommodate longer tows; however, it has been determined that increasing lock size is not economically feasible north of Peoria.

The Lemont rail bridge over the Sanitary and Ship Canal owned by BNSF is not required to open and can be a barrier.

Stakeholders note that short sea service to Eastern Canada and the East Coast of the U.S. needs improvement.

Figure 4.5 Water Freight Needs



Note: Responses: 2 Private, 22 Public.

Air

O'Hare Facilities

The organization of infrastructure at O'Hare is challenging. Existing and planned cargo facilities are on the east of the airport while freight forwarders are located to the west. Limited west side access to O'Hare exists, which is an issue for freight forwarders. Additionally, cargo facilities are scattered in multiple locations, requiring multiple stops to consolidate freight.

Trucks must drive on public roads around the airport to access freight facilities and face delays due to traffic congestion and rail conflict. It can take one hour to drive all the way around O'Hare. Also, the York and Irving intersection has an at-grade rail crossing with trains that sometimes create up to 45 minutes of delay. Improved perimeter access for freight forwarders is needed.

Security

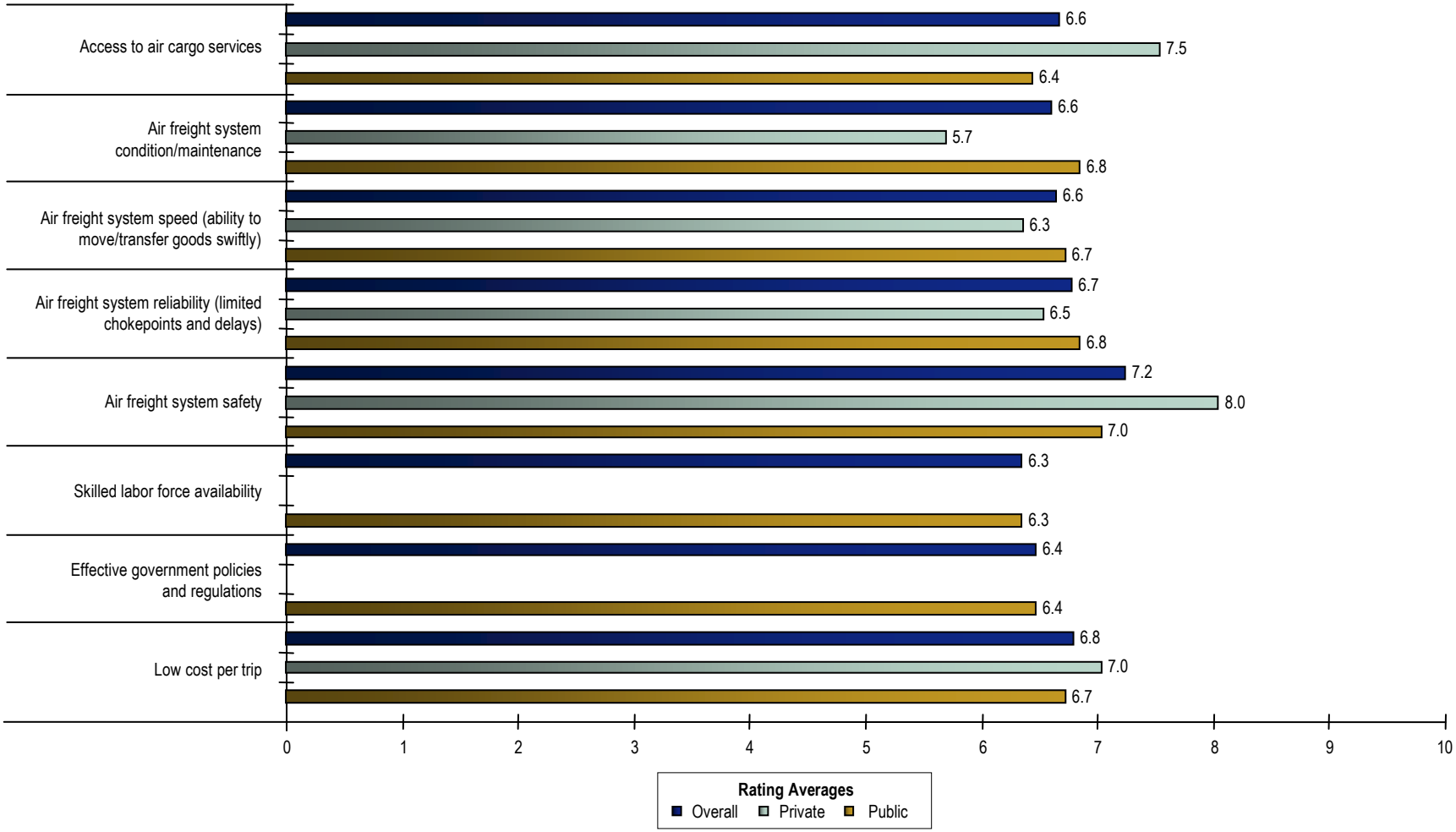
Better communication and the understanding of TSA protocol is needed. Air cargo carried on passenger flights has greater inspection requirements than cargo on freighters. Inspections are required for 100 percent of cargo on passenger planes, compared to much lower inspection requirements for cargo on freighters. Due to these requirements, loads for belly cargo must be delivered much earlier (arriving approximately four hours before lock-out). With passenger aircraft, the amount of freight that can fit on any given flight is determined immediately before the flight departs based on the weight of passenger baggage and mail, which are both given preference.

Survey respondents rated air freight system safety as the top issue in need of improvement (See Figure 4.6).

Customs

Overall, the air cargo industry finds Customs in Chicago to be very easy to work with. The one challenge is with the U.S. Department of Agriculture (USDA), which is part of Customs but does not have the same access to data as Customs. Cargo is put on hold more often just in case something falls under USDA authority.

Figure 4.6 Air Cargo Needs



Note: Responses: 6 Private, 22 Public.

4.3 NEEDED IMPROVEMENTS

Improvements to Benefit Local Communities

Many local communities experience significant impacts from freight, particularly rail delays at highway-grade crossings, heavy truck volumes on state and local routes, and impacts on passenger rail due to freight rail conflicts. In the survey, public sector respondents rated the importance of limiting impacts on local communities as 7.7 on a scale of 10 (see Figure 4.7).Communities have expressed a desire for exploring ways to reroute freight around the Chicago region such as a truck bypass around the region, e.g., Prairie Parkway. Municipalities would like freight rail not terminating in the region to bypass the region as much as possible.

In areas where conflict will remain, communities desire improvements to smooth flow of through-traffic and minimize impacts. Communities along the EJ & E rail line, along which increases in freight rail traffic are anticipated, would like to be a priority for grade separation projects. This is listed as one of the top priorities for public sector respondents in the survey regarding rail/intermodal improvements (see Figure 4.8).

Communities feel that comprehensive planning processes should be used to direct truckers to the best regional roads for truck traffic and prevent damage to infrastructure. Truck congestion and roadway impacts need to be considered and mitigated around Logistics Park Chicago in Elwood and the future Joliet facility serving UP.

Mayors of local communities would like to see more funding sources for safety improvements at grade crossings to enable quiet zone designation, which is costly for communities.

Truck

The trucking industry seeks better construction management processes to reduce construction-related congestion. Operators would benefit from advanced traveler information to enable routing decisions to be modified in advance of bottlenecks. More centralized traffic information resources were one of the top two improvements listed by private sector survey respondents (see Figure 4.7). The trucking industry recommends travel demand management strategies to reduce highway demand and congestion to improve truck operations.

Truck parking locations are needed throughout the region, including near O'Hare to serve the air cargo industry. The Illinois Trucking Association has advanced several proposals to add truck parking at underutilized facilities (e.g., Soldier Field, U.S. Cellular Field, and Rosemont Horizon), but these proposals have not advanced. Consideration of these and other options for regional truck parking are desired.

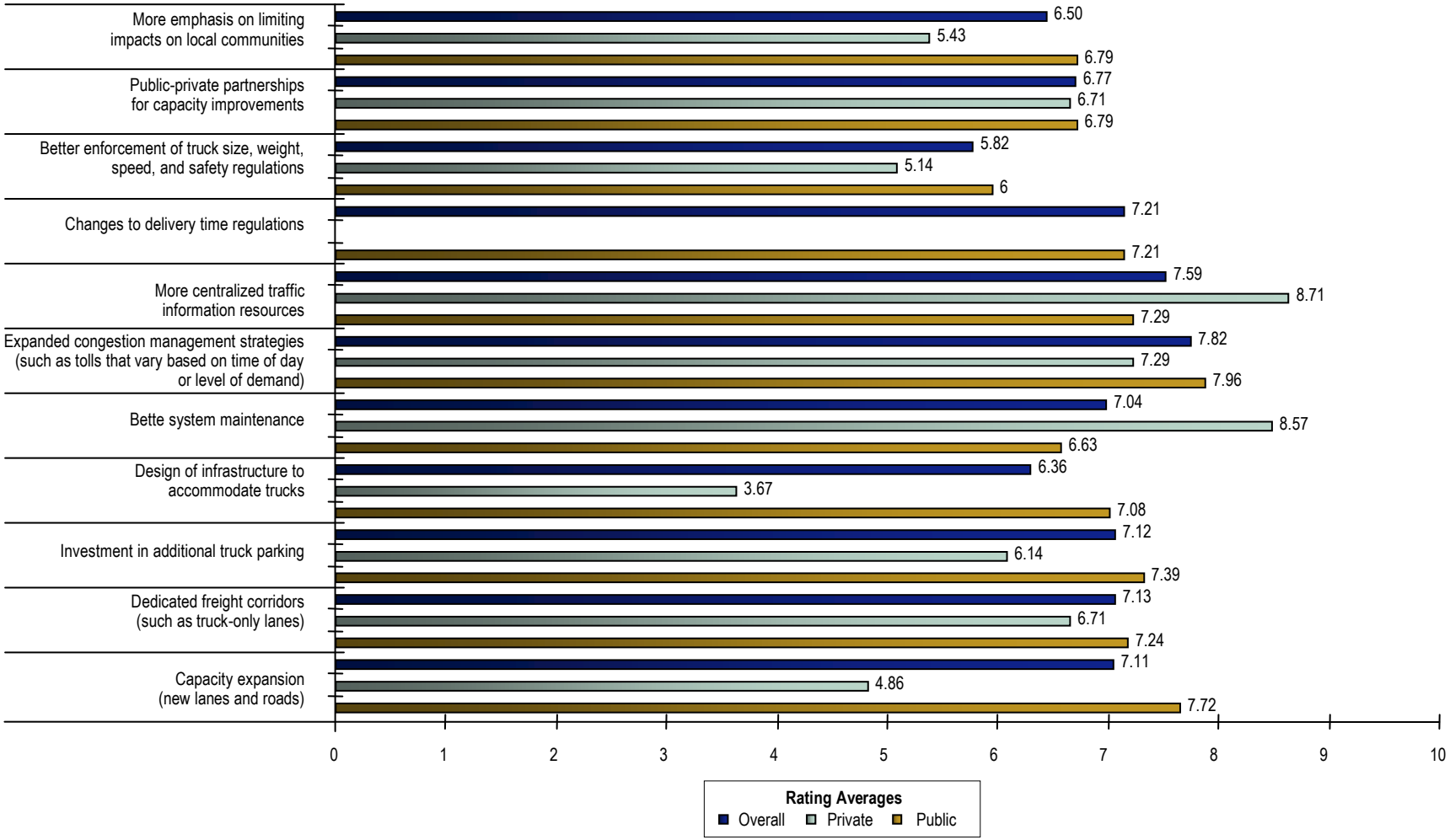
Heavyweight highway corridors as in Indiana and Michigan, permitting the same weights as those states, would be beneficial for cargo from Indiana and Michigan to reach the Port of Chicago. Shippers of heavy cargo would like more designated truck routes.

The trucking industry showed a high level of interest in congestion management strategies that addressed demand for passenger vehicle travel. Transportation demand management (TDM) ideas offered included: providing better transit service to get passenger vehicles off the road; ride-share programs such as those for Federal employees in Baltimore-Washington-Virginia; expanding Pace's vanpool program; and encouraging employers to stagger start times.

Additional infrastructure improvements to benefit trucking recommended by stakeholders (not prioritized) are:

- I-57/I-294 interchange;
- Beltway around O'Hare from I-90 eastbound to I-294 southbound;
- Improvements to I-290 interchange with I-294;
- Higher gross vehicle weights be permitted around intermodal facilities;
- Dedicated high gross vehicle weight routes;
- Reduction of congestion on I-55;
- Crosstown expressway;
- New western access to O'Hare Airport;
- .Grade crossing separation at 130th and Torrence Streets;
- Illiana Expressway;
- New interchange at I-55 south of Arsenal (potentially truck-only);
- New lanes on I-55, I-80/94, and I-57;
- New interchange at I-57 and Manhattan-Monee Road;
- Expansion of IL-394 and conversion to limited-access;
- Widening of Routes 59 and 30;
- Improvement of Will County arterials such as Laraway Road, Cedar Road Wilmington-Peotone Road, and Weber Road;
- 130th street alignment at CN viaduct (turn is too tight for trucks);
- Implementation of the CREATE Program;
- Patterson and Brandon Road grade crossings in Joliet; and
- Viaduct clearance improvements in Joliet (old Rock Island-Metra, BNSF and UP).

Figure 4.7 Importance of Potential Trucking Improvements



Note: Responses – 7 Private, 26 Public.

Rail/Intermodal

The rail industry feels that projects in the CREATE Program address the major rail bottlenecks and capacity constraints in the region. The program should be fully funded and implemented to mitigate the most significant rail operations issues and rail-passenger conflict. The development of a Common Operational Picture for increased visibility of train operations is part of CREATE. This new technology and collaborative effort will improve operations by helping receivers see where traffic is coming from. Private-sector respondents to the survey indicated that public-private partnerships are one of the most important options for improving rail/intermodal transport (see Figure 4.8).

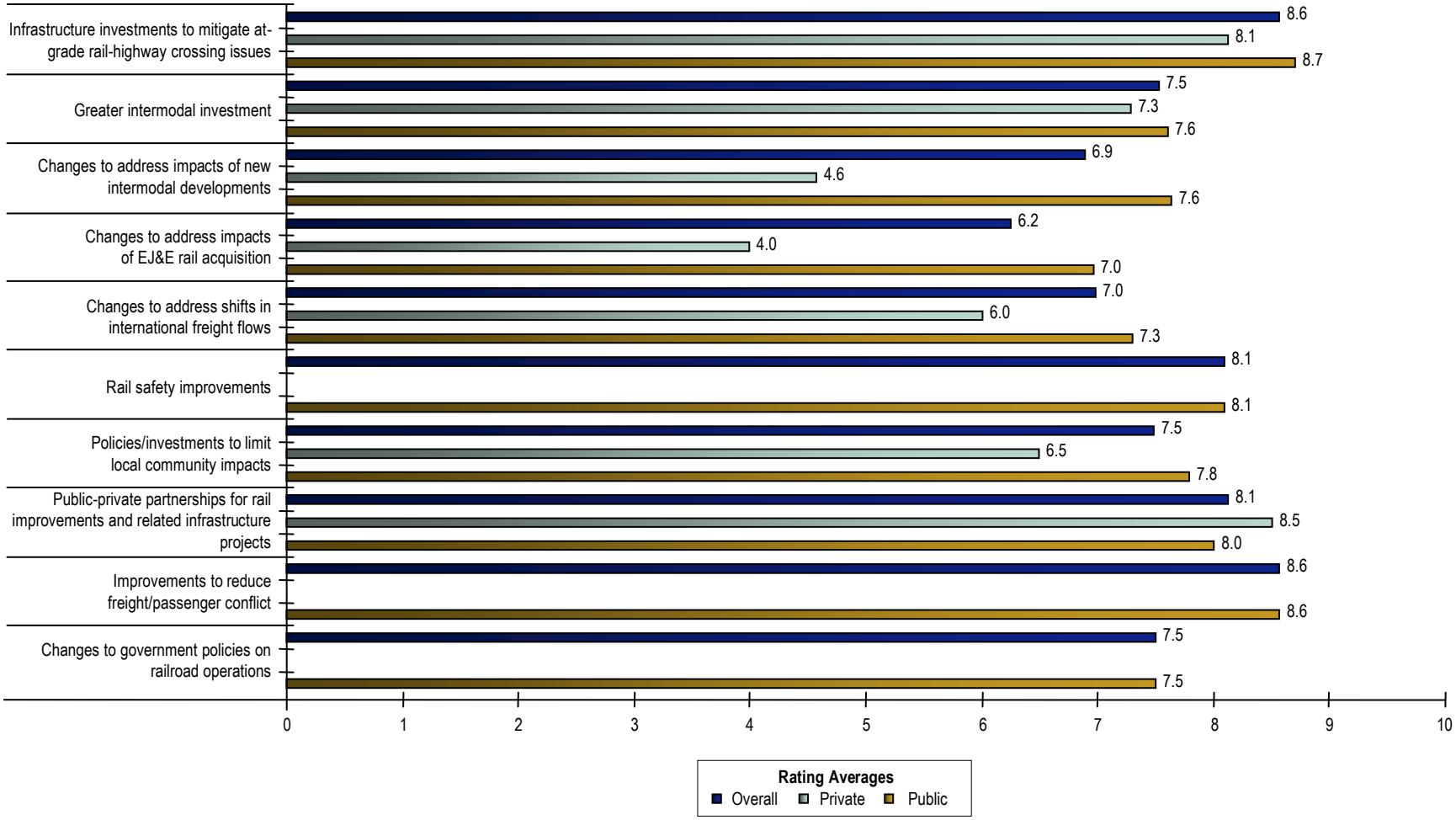
Stakeholders noted that Cook County rail yards should be revitalized to draw carriers back in, resulting in shorter drayage distances. Respondents stated rail projects should fit where the market demands with mitigations to avoid opposition. Federal law should provide support for competition and capacity expansion.

Stakeholders suggest that rail freight not destined for Chicago should be routed on new tracks outside the commuter-shed to Chicago to minimize regional impacts. Additionally, the impact of high speed rail and intercity rail service must consider long-term impacts to water and communities to ensure lowest possible impact and greatest benefits.

Stakeholders noted that the impact of the Panama Canal expansion by 2016 should be evaluated to determine what effect shipping cargo around Chicago to East Coast ports will have. This may also have an impact on expansion of high-speed and intercity rail, which typically shares freight tracks in the U.S.

Private sector respondents stated that trucking is the dominant freight transportation mode in part because trucking is the easiest mode to do business with; they feel more freight might move via rail/intermodal if conditions were more favorable. Providing grain loading facilities inside intermodal facilities to transfer it into cargo containers for rail transport would benefit the agricultural sector and reduce heavy trucks on roads.

Figure 4.8 Importance of Potential Rail/Intermodal Improvements



Note: Responses – 8 Private, 25 Public.

Water

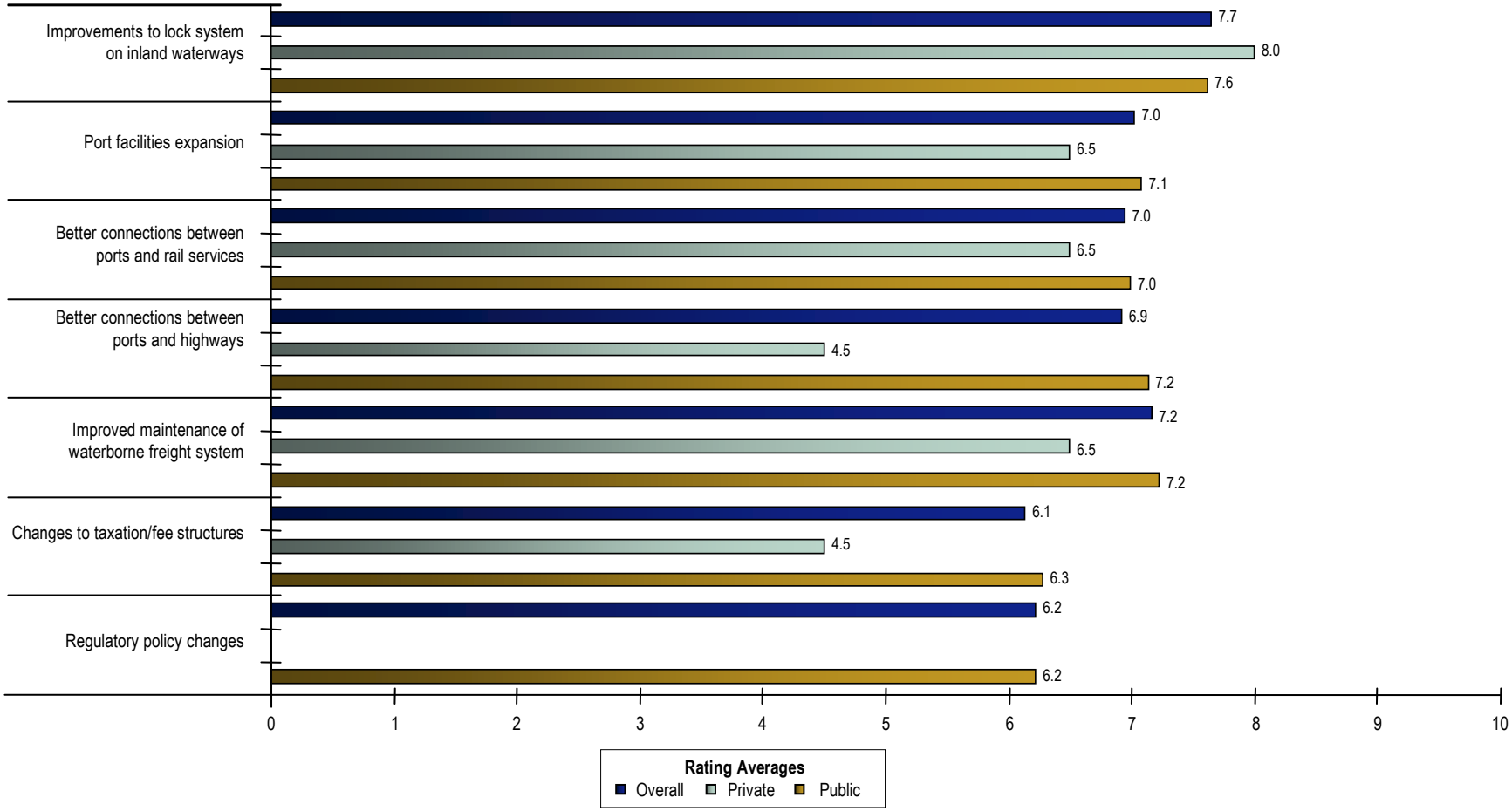
The Illinois Water Carriers Association continually generates a list of needed improvements in the region, largely related to dredging, which is shared with the U.S. Army Corp of Engineers (USACE). USACE addresses this list with its ongoing dredging and maintenance program. Three waterways projects are being funded with American Recovery and Reinvestment Act (ARRA) money: Lockport Lock wall ($88 mil.), Dresden/Brandon Road Locks lighting replacement; replacement of work flats (barges) at 8 locks in Illinois. Stakeholders feel that water systems and locks that are not cost-effective due to limited traffic should consider increasing fees. In cases of underperforming locks, where the cost of maintenance outweighs usage, removal should be considered.

The industry is moving toward developing a prioritized National Backlog of Maintenance list, given limited resources and need to invest in projects of national and regional significance. Improvement to locks and inland waterways is the highest priority among private sector respondents (see Figure 4.9). More fleeting (parking) for vessels is needed, particularly at locations north of Lemont, IL.

The industry claims delays at railroad bridges have gotten worse, although currently documented levels of delays are low. If the boat calls for the railroad bridge to open and the rail company does not do so in time, it can be fined with a civil penalty. Barge operators need to do a better job of reporting delays in real time so that they can be documented. A Coast Guard reservist is assigned to civil penalties to facilitate this process. Plans for high – speed rail could affect drawbridges. Currently the regulation requires the train to stop for a drawbridge to open if needed. The Rock Island Bridge may handle high-speed rail traffic in the future, and balancing high-speed rail operations with water operations must be considered.

The Port of Chicago would like the St. Lawrence Seaway locks to be increased, which would increase shipments to Chicago and change the market on the Great Lakes. However, it is speculated that this is unlikely because it would not benefit other Great Lakes Ports as much as it would benefit Chicago.

Figure 4.9 Importance of Water Freight Improvements



Note: Responses – 2 Private, 22 Public.

Air

In considering future options, stakeholders recommend considering the regional impact of Gary-Chicago, Milwaukee General Mitchell and Rockford airports.

Peotone

Some stakeholders feel that a South Suburban Airport in Peotone has the potential to present be a significant advance for the air cargo industry and freight forwarder community in the Chicago region. This is due to proximity to BNSF's Logistics Park Chicago in Elwood as well as the planned UP intermodal facility in Joliet. The proximity of freeways to Peotone airport would be very beneficial, especially if the Illiana Corridor is developed as an alternative to I-80. The area has available inexpensive land for cargo handlers to develop. To accommodate freight successfully, Peotone would need to be designed with a 10,000 foot (2 mile) runway.

Others view the Peotone concept as no different than other alternative airports such as those in Rockford, St. Louis or Milwaukee. For Peotone to be a success it would need to have a critical mass of aircraft lift. It is hard to foresee how international passenger carriers with heavy jets and combination carriers, (e.g., Air France, and Lufthansa which have passenger and freighter service) would reach critical mass at Peotone. Passenger operations of major airlines would likely remain at O'Hare. Only freight carriers could easily move to Peotone or another airport because they are not tied to a passenger flow.

Even if freight moved to a new Peotone facility, there still would be a need to collect freight at O'Hare and transfer it down to Peotone if freight operations were there. For example, if belly freight came in on passenger flights, it would need to be trucked to Peotone. There is potential, however, if Peotone wants to become an airport serving freighters only. However freight from Peotone would still need to be trucked to O'Hare for the freight forwarders to handle.

Only if a major relocated would Peotone become an option for other passenger carriers. Peotone could work to provide domestic access to Chicago for a new airline entering the market.

O'Hare

The O'Hare Modernization Plan includes a proposed new North Cargo Plan, which would include in a new North Cargo complex including 18 freighter slots and 2 million square feet of cargo space. This location is on the old Air Guard area on the north side of the airport. It is currently awaiting financing. The air cargo community is glad to have new freighter parking slots but it will present some challenges. Freight forwarders will continue to have to deliver freight to a variety of cargo areas (primarily 3 locations)

The southwest area of the airport was not available for new cargo area development because of litigation (cemeteries and Bensenville issues) -the North Cargo area is was the only space that was available. South Cargo area expansion is a possibility in the future, but it is located in DuPage County. Long term plans are for parking and other revenue generators associated with the Western Terminal.

The master lease with the airport for all existing cargo buildings is up on the same day in 2018. There is concern that the airport, in an effort to make the proposed North Cargo area viable, will require airlines to move there and free up the south side of the airport. It would be a concern to industry if ground lease costs were to increase sharply.

O'Hare Ground Transportation

The at-grade rail crossing at York and Irving Park is a priority as this is on the only route to the airport from the west and is the top issue for airport access. Better connections between airports and highways are ranked as a priority improvement by survey respondents (see Figure 4.10).

The airport must consider ground transport for the potential North Cargo Area. Every 747 freighter has 50 inbound truck movements and 50 outbound movements. If all freighter slots were used at least daily, potentially there could be 2,000 truck movements in and out of the North Cargo area every day mixing with vehicles at Touhy and Higgins.

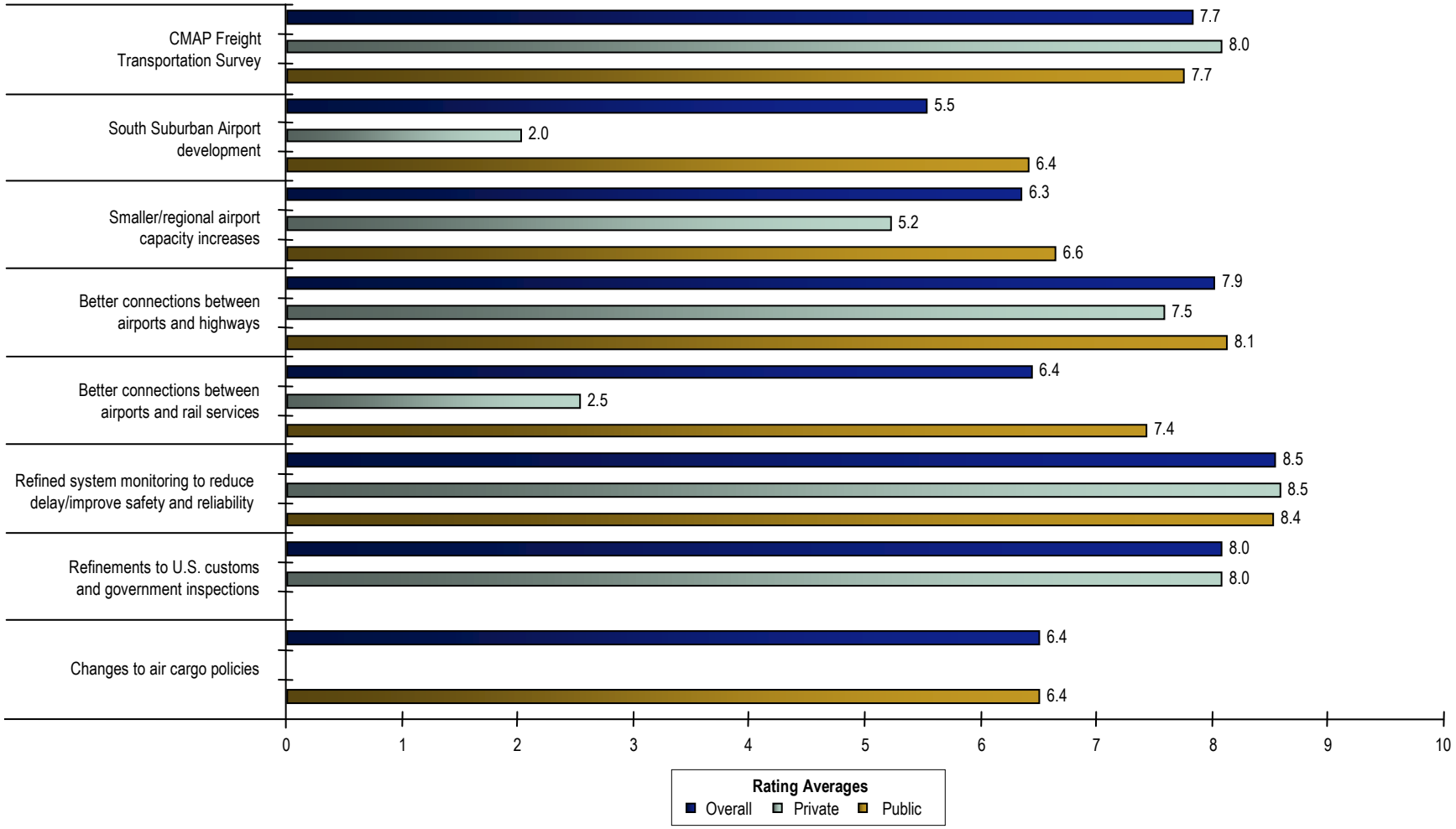
A dedicated freight roadway on airport property is recommended once the North Cargo area is in use. From the new North Cargo area and two off-airport facilities on Touhy, no road exists to get to the passenger aircraft (a runway is in the way). If new North Cargo is built there will be a need to have a way for finished cargo to drive to passenger planes. An internal road from North Cargo to the passenger ramp without going outside the fence is under study.

A perimeter road around the airport for restricted traffic including trucks and public transit would be very beneficial. A separate freight truckway on Mannheim Road, outside the airport perimeter would allow traffic from W. Higgins on Mannheim to Irving Park without any stops and would speed freight movement.

Other Issues

The top airport improvement identified by both public and private respondents is improved system monitoring to improve safety and reliability, e.g., improved air traffic control. Figure 4.10 shows ratings of all potential air freight improvements.

Figure 4.10 Importance of Potential Air Cargo Improvements



Note: Responses – 6 Private, 23 Public.

4.4 TRENDS

Of the 12 private sector companies that responded to the survey question about expectations for the next five years, 75 percent anticipate expansion. However, given the current economic conditions, the freight industry is still waiting for volumes to return to normal levels.

Stakeholders state there a need for the shipping community to become more competitive in the future. Shippers struggle with the carriers' level of willingness to understand shipper needs and react with improved service and pricing. Stakeholders anticipate future consolidation of facilities and services. Use of information technology is steadily increasing to manage business, supply chain, and personal transportation support systems.

Truck

The trucking industry sees continued growth in the Chicago region. Several trucking firms believe that intermodal transportation will be the major transportation growth area in the Chicago region, but they are supportive of the growth due to the demand for trucking services for support (first mile, last mile, and transfers). The industry expressed concern over the regulation of trucks and methods of addressing funding shortfalls by increasing taxation and usage fees on trucks, but overall they are optimistic for their industry's future.

Rail

Rail companies foresee length of trains increasing (from 125 cars to 175 cars). The current limiting factor is tensile strain on drawbars. Railroads are getting better at operating locomotives at the middle of and end of the train (known as distributed power or DP), which allows them to operate longer trains because each drawbar doesn't have to pull as much load. With longer trains, the limiting factor is fitting into the infrastructure (such as sidings for passing). Sidings are frequently designed for a maximum train length of 10,000 feet, which will soon be exceeded by future, longer trains.

In the future rail companies see increased potential for interline, coordinated service and more partnerships with other railroads, as they are able to identify opportunities for mutual profitability. Today, railroads are maximizing their own profit, frequently at the expense of efficiency, by trying to move loads the greatest distance on their own network to increase line haul revenue.

Rail operators see Chicago as remaining the number one rail gateway for years to come. Rail companies anticipate increased efficiency, particularly for traffic that does not have to stop in Chicago. Shippers want cars to go through Chicago because the route results in the shortest total mileage. For example, the NS Elkhart, IN facility (hump yard) classifies cars for BNSF before entering Chicago and handing off trains in order to increase efficiency. UP performs similar

service for NS. Growth potential exists for intermodal rail service, although intermodal has a much smaller profit margin than other types of rail traffic (e.g., tank cars).

Rail companies are exploring new markets. For example, UP has gotten more into the market for perishable goods, mainly agriculture from California, Oregon, and Washington. Time-sensitive goods have begun moving on high priority trains, which are tracked more closely and avoid delays due to reconfiguration. Goods can move from the west coast to the east coast in 3-4 days; UP and CSX offer priority "Blue Streak" Service.

The new UP intermodal yard in Joliet slated to open in June 2010 will shift UP traffic patterns in the Chicago region. This new facility was driven by significant demand for a facility in this location by UP customers. UP and BNSF compete for international service (e.g., Asia); and price is not the only criterion – location and convenience are critical. Railroads are contracting out land acquisition and land development more due to community issues. For example, UP used CenterPoint to develop the new Joliet location.

Container shipping lines seek goods to fill their backhaul to Asia. The containerized grain business to Asian markets is driven largely by this trend. Shippers estimate that less than 5 percent of backhauls are loaded.

Water

The Port of Chicago and barge operators see little potential for large-scale movement of intermodal containers on barges. The restrictions to Great Lakes growth and shipping containers on Great Lakes vessels are those posed by the St. Lawrence Seaway, whose locks are 800 feet long and 80 feet wide. Even the smallest containers ships do not fit through the seaway. However, it is possible to put containers in the hull of a ship. In the U.S. it is not the goal to get vessels as far inland as possible because it is usually faster to offload at seaports and rail or truck to the final destination. The shipment time may never be competitive-to transport a container by water on inland waterways – from New Orleans to Chicago takes 21 days on barge, versus 2-5 days on rail. Liquid tows from New Orleans to Chicago take 14 days.

Agriculture has moved outside the Chicago region – the closest grain elevator to Chicago is in Morris. More corn processing plants are in the area – 3 to 4 ethanol plants are on the Illinois River.

The Panama Canal may bring bigger vessels into the center Gulf. Now Panamax vessels are handled there. However New Orleans harbor has a 45 foot draft limit and it's unlikely it would be dredged out much more to handle Post –Panamax vessels.

Environmental regulations have had a big impact on industry that ships via water, such as the steel industry. Often it is cheaper to ship materials from the other side of the globe than to buy locally.

Unions have affected the cost of operating plants in the Chicago region. Many plants are moving to the Southern U.S. due to labor cost issues.

Chicago is not an ideal location for water import/export businesses. It is much easier for businesses to locate near the deep water seaports. However, there is some volume of exports from the Great Lakes to Montreal, with transloading to ocean ships.

Currently water carriers are seeing more exports than imports, due to low domestic demand and a good crop year for grain. Generally when the economy is stronger there is more inbound than outbound barge traffic

The Chicago market for barge traffic is closely tied to construction activity and steel mill operation, both of which are currently down. Today, the Chicago barge market is almost entirely asphalt and concrete.

Air

It has been noted by industry that these are worst times the air cargo business has seen in 20 years. For example, Air France and KLM operated ten 747 freighters per week in March 2009. As of September 2009 they are down to 4 freighters per week.

There are different opinions among industry experts as to trends with respect to use of freighters in the future. Some industry stakeholders feel there is a significant shift away from freighters (dedicated freight airplanes) toward carrying freight in the belly of passenger planes (which only allow freight in remaining space/weight after passengers and mail are loaded).

Several airlines are out of or getting out of the freight business (e.g., Northwest was absorbed by Delta which only does belly freight, American Airlines no longer is in the freighter business, Nippon Cargo Airlines is merging with passenger-focused Japan Airlines and it is unclear whose business model will dominate). There is general merging of carriers and downsizing of air freight operations. Large cargo airlines no longer exist. The only dedicated freighters now are charters. This represents a shift back to how the air cargo business was structured in the 1960s.

Another perspective is that the freighter business is anticipated to continue to grow, particularly given the upcoming security requirement to screen cargo on passenger planes 100 percent beginning in August 2010. Boeing and others project how air cargo will fly over the next 10 to 20 years and that the use of freighters will increase.

Alternative Airports

Freight forwarders are considering Rockford airport as an alternative to O'Hare but are hesitant because it is 90 miles away. Additionally, Rockford is less desirable from the perspective of 3PLs because there is no rail access. Rockford

markets itself as a place where freight is shipped out of after it is built in Chicago.

Mid-America Airport (St. Louis) is trying to draw perishables traffic from South America but has attracted just a couple planes, which is not enough to develop a new market.

International carriers are more likely to truck cargo to gateway airports (JFK, LAX) than to fly it there and transfer it to an international carrier. It takes only 18 hours to truck from Chicago to JFK. Five pallets of freight that could fit on the main deck of a freighter can fit on a truck. Costs are lower due to avoiding landing costs, better access to international carriers, fewer delays, lower crew and fuel costs.

One example of trucking as a substitute for air freight is Polar Air Cargo, which has shifted operations to Cincinnati and trucks goods between there and the Chicago region.

New Business Models

Future trends are likely to include true intermodal service in Chicago – greater coordination between trucking, rail, water, air. Growth in ocean shipping is even affecting the Chicago market as more trucks are doing drayage for the steamship lines, transportation containers from intermodal yards.

Given economic pressures, some new models are emerging, e.g., steamship lines were selling "door to door" service but having trouble with moving cargo "the last mile." Some air freight trucking companies have started to work for steamship lines delivering cargo to the final destination.

Potential Regulatory Issues

Moving forward, noise issues could be a problem for the air cargo industry with respect to potential regulation. Cargo flights happen at night – this is the nature of the air cargo industry. Customers deliver to air cargo in the late afternoon and flights operate from 10 p.m. to 6 a.m. Most passenger traffic is during the day; night traffic is from freighters. When residents near the airport hear loud airplanes during the night some call their elected officials to complain. The industry would find nighttime noise restrictions very detrimental; such restrictions would dramatically alter the cargo business. A number of airports around the world have recently enacted such policies and have had to dramatically alter flight patterns, e.g., Frankfurt. New airplanes are more fuel efficient and are quieter. As time goes on, freighters will likely become quieter.

Manufacturing

Manufacturing operations are continuing to migrate to China and Mexico. This is largely due to the cost of labor, which is eight times more expensive in the U.S. than in developing countries. However, labor costs in China have gone up and

have gone down in Mexico due to the exchange rate, which will make transportation more of a factor now. For example, Shure is keeping both China and Mexico manufacturing plants in operation so they can be agile. Shure and other companies feel that they need to maintain manufacturing capacity in Asia given the huge market there.

4.5 FUNDING OPTIONS

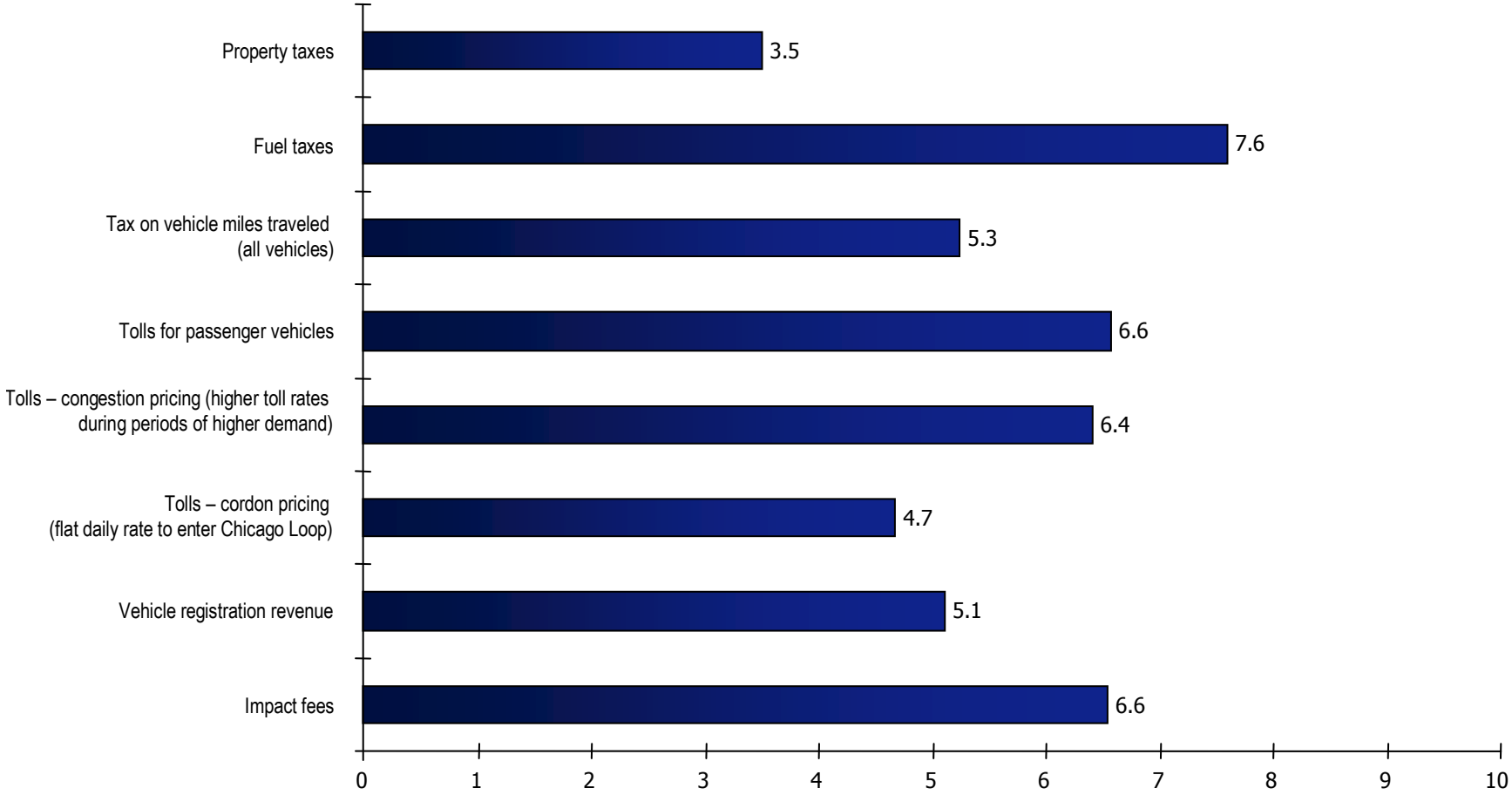
Stakeholders emphasize that whatever funds are secured for improvements, it is important to be efficient with those funds and not to allow them to be redirected by the legislature to other purposes. Until there is trust that funds dedicated to transportation will be spent only on transportation, it will be difficult to secure new funding streams. Fees are perceived as a fraudulent "tax." It is important for fees collected in an area to be spent in that area.

The fuel tax is desirable because it is easy to administer and to maintain as a dedicated funding source for transportation. Fuel taxes were ranked highest as a funding option in the survey, as shown in Figure 5.1. However, fuel tax funds are decreasing quickly and conversion to alternative fuel and electric vehicles is likely to accelerate this decrease.

Stakeholders commented that tolls should apply to all vehicles, not only passenger vehicles. Congestion pricing should be expanded to include the existing toll road system and other congested roadways. Support for tolls to fund highway improvements was ranked as less than 5 out of 10 among survey respondents. The trucking industry is strongly opposed to increased tolls. They feel trucks already cover a disproportionate share of the Illinois Tollway's costs, given the significant peak-period tolls for trucks. Chicago is a very expensive region in which to operate. When tolls are increased, trucks shift to arterials and operate on less safe roadways.

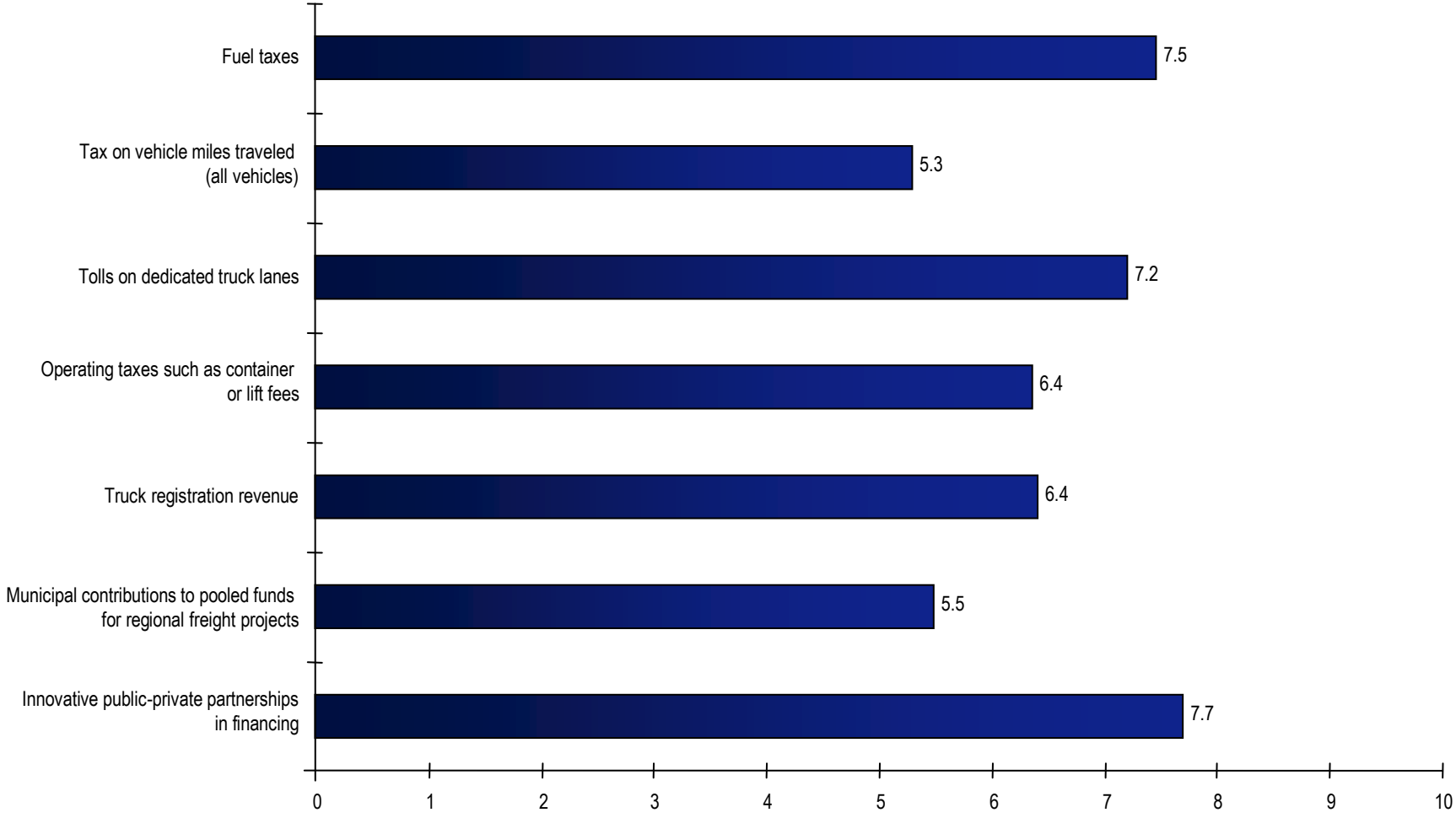
To fund freight improvements, the greatest levels of support are among public-private partnerships and fuel taxes. Tolls on dedicated truck lanes also received fairly high levels of support by participants in the survey, as shown in Figure 4.12. Property taxes received the least support, as shown in Figure 4.11.

Figure 4.11 Highway Funding Options



Note: 31 responses, public and private.

Figure 4.12 Freight Funding Options



Note: 32 Responses, public and private.

4.6 POLICIES AFFECTING FREIGHT AND LOCAL ISSUES

Land Use

As shown in Figure 4.13, government incentives have the greatest impact on business. Businesses also note they are impacted by the NIMBY mentality. For example, location of intermodal facilities has become increasingly challenging due to local community resistance.

Local delivery time ordinances are very challenging for goods movement, particularly for trucking companies and those businesses receiving frequent deliveries such supermarkets. Industry feels that often delivery time ordinances exist in areas not adjacent to residential development and unnecessarily restrict operations.

The location of major freight generators impacts regional transportation flows. Intermodal facilities could be organized better to cut down on the length of drayage.

Policies

Community Policies Impacting Freight

Local policies that affect freight include delivery time restrictions, overweight permitting, designated truck routes, and noise regulations. These are often determined independently by jurisdiction and can have significant impact on regional freight operations.

Communities would like to consider new policies to manage freight more effectively. Potential new policies include establishment of a regional port authority to coordinate investments, or possibly a port authority including Will County intermodal facilities. Additionally, communities are interested in considering methods to account for residents and businesses that pay the quality-of-life costs for cheap and efficient rail transportation. Improved coordination with passenger rail planning is desired. Communities would like increased consideration of transporting goods via barge to rail or truck. Stakeholders would like to consider development of a regional freight policy.

Better incorporation of safety in project planning and implementation. Inherent measure of project performance in attaining objectives that were stated in project's original purpose and need. In other words, did the project actually meet the original objectives?

Business Barriers

Stakeholders note that government needs to understand freight, even though it does not vote. Historically, limited public investment has been made in freight infrastructure. No cohesive urban/suburban transportation strategy and

funding mechanism is in place. Some stakeholders feel Illinois is not a business-friendly state.

Several stakeholders expressed support for CREATE while one felt that it is not needed. One feels the EJ&E acquisition should not be legal.

Weight limits per TEU can result in significant empty space in containers when products are heavy, and stakeholders would like increased over-the-road weight limits. Access into freight areas needs improvement as many communities have differing overweight permits regulations that are difficult to manage.

Short sea shipping could work if the Harbor Maintenance Tax were discontinued – now this makes short-sea shipping cost prohibitive. There must be a financial incentive for shippers to use the water system.

Freight Consideration in the Planning Process

As shown in Figure 4.14, communities most strongly consider safety with respect to freight. Many other freight factors are important to communities as all factors received more than a 6 on a scale of 10 in the survey.

Community Freight Planning

As shown in Figure 4.15, stakeholders feel that greater attention to freight in community planning can be achieved. Most communities do consider freight in transportation planning, but half do not consider freight in land-use policies. A large proportion of communities do not coordinate freight planning with neighboring jurisdictions. Less than half coordinate freight transportation planning with local businesses.

Communities note that heavy truck volumes conflict with pedestrian and bicycle transportation and damage roads. The state agency responsible for highway-rail grade crossing safety would like to see more emphasis placed on safety and reducing delay at crossings. Drayage distances from intermodal facilities should be considered as part of regional freight planning.

Figure 4.13 Land Use Impacts on Business

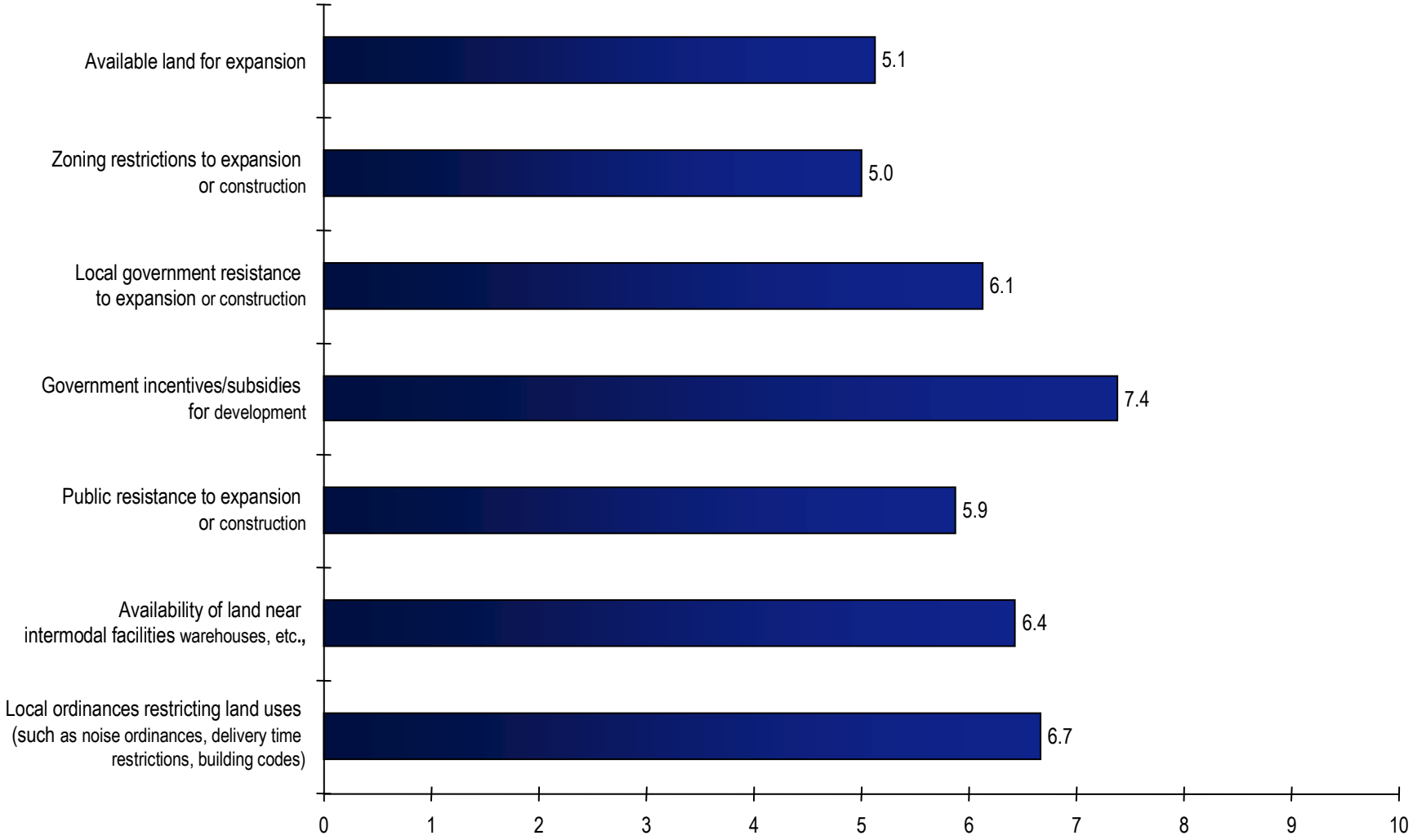


Figure 4.14 Community Freight Considerations

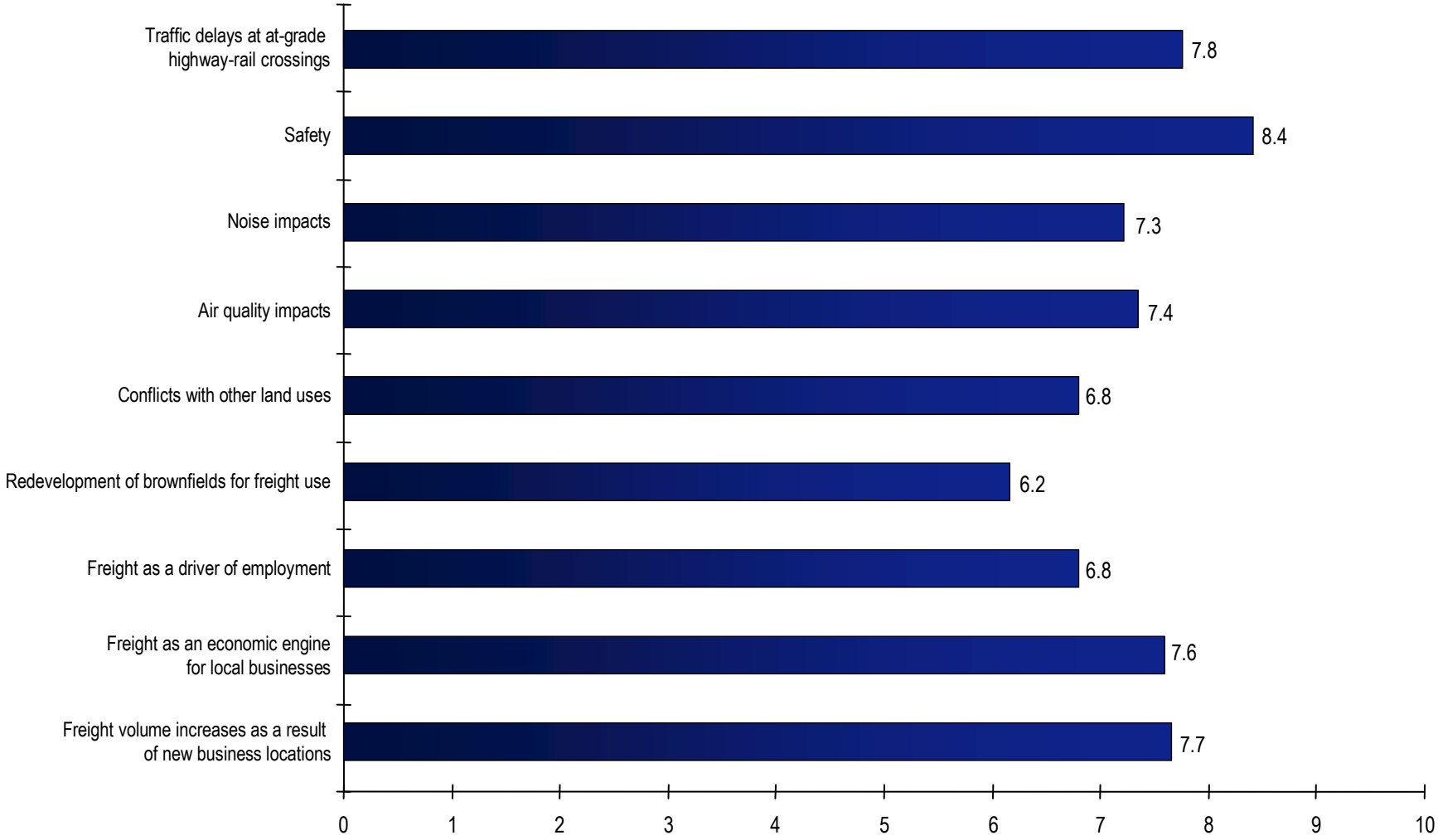
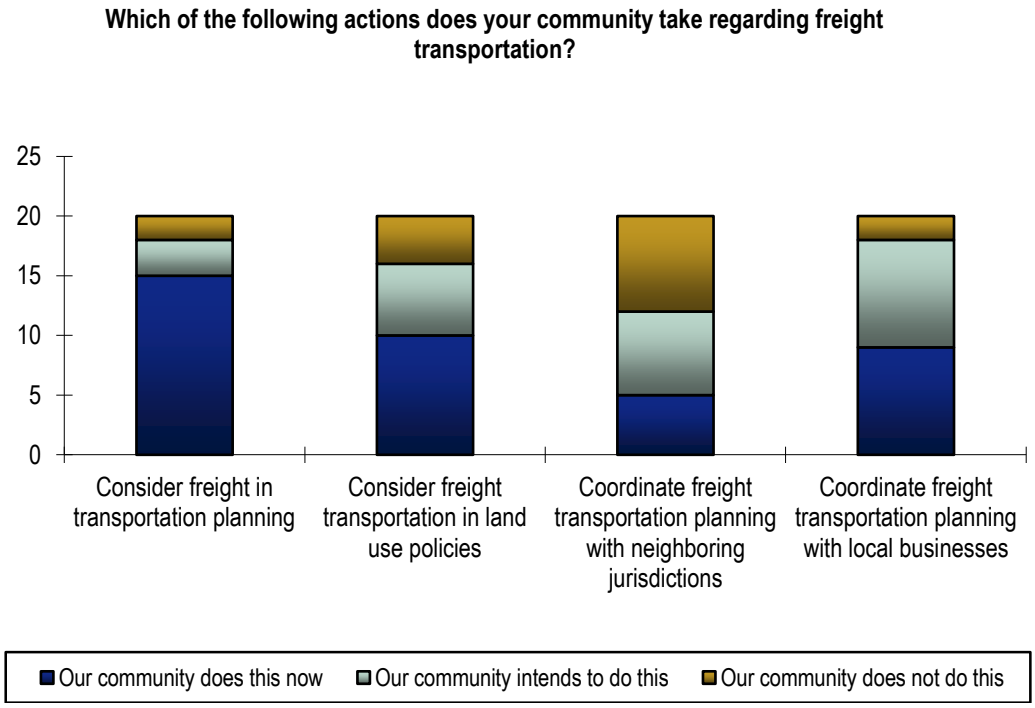


Figure 4.15 Community Freight Planning



Note: 20 Responses.

4.7 WORKFORCE ISSUES

The importance of freight-related jobs (manufacturing and transportation) needs to be balanced with the nuisance impacts on municipalities. Industry does face workforce issues, although they are closely associated with economic cycles. As shown in Figure 4.16, future availability of a skilled workforce is a major concern.

Truck

Truck labor issues are largely related to economic conditions. During the economic boom periods, truck driver shortages are common. Currently, with trucking companies closing due to business declines, driver shortages are not an issue

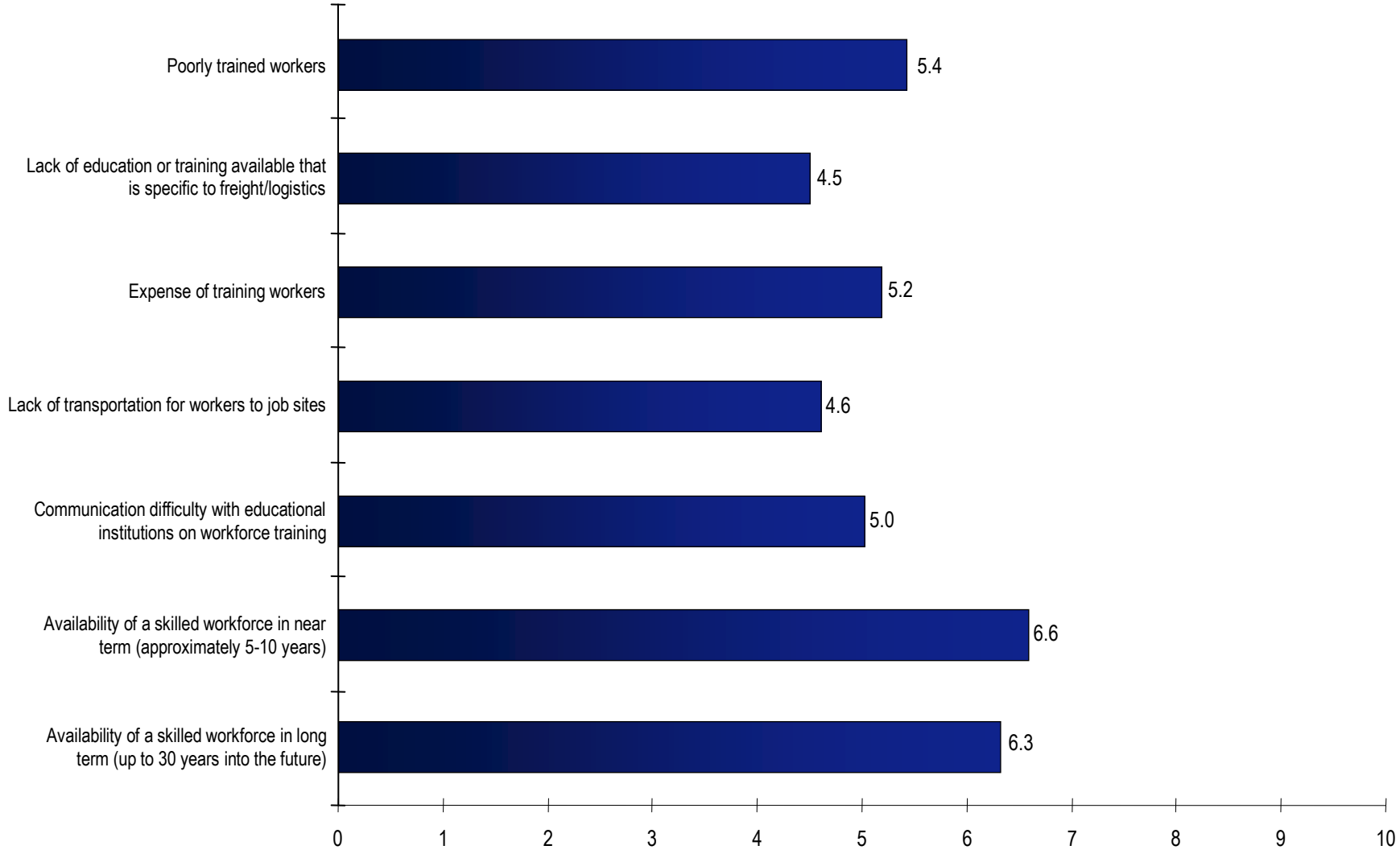
Rail

Key issues for the rail industry are lack of communications skills and comprehension by potential employees. Other barriers are English proficiency, willingness to work nights/weekends/holidays, willingness to work outdoors, and the ability to work in a drug-free workplace. Railroads generally do most of their own training and hire many employees with only high school education. However technical positions such as diesel mechanics are difficult for the railroads to find and retain.

Water

Work schedules on barges are difficult and generate turnover -21 days on and 21 days off. (Lake Calumet staff work one week on and one week off). The time to move up from deckhand ($38K salary) to having a license to operate ($100K salary) used to be 4 years; now it is 10 years and is less of an incentive to retain staff. The lengthening of this time period is largely due to USCG regulations and tougher licensing rules. It is harder to maintain a license, especially since use of prescription drugs is now an issue.

Figure 4.16 Workforce Issues



Air

The air cargo industry has been involved with the City Colleges and Chicagoland Chamber of Commerce initiative to train the air cargo workforce. Two years ago many warehouses were experiencing 80 to 100 percent turnover every year. One aspect of the problem was not finding the right people. The newly developed training certificate program at the City Colleges gives warehouse workers basic skills, and airlines are hiring graduates.

Another issue is local transportation deficiencies around O'Hare that are a barrier to workforce retention. Workers can get to O'Hare to work in passenger operations, but there is no way to get workers from the airport to cargo areas on transit. The last mile to the cargo areas is a problem. Before the economic downturn, even when wages were $11 per hour, with benefits such as 401Ks, airlines could not fill the jobs. Pace Bus is looking at some new options for O'Hare area transportation, which would be very helpful.

It is easier to find warehouse workers than to find computer trained workers that need to understand manifests and work with customers in the office. Training for office workers will be the next phase of the training program, once the economy rebounds and demand for employees increases.