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MEMORANDUM

To: Planning Coordinating Committee

Date: October 1, 2008

From: Matt Maloney, Senior Manager, Program and Policy Development
Annie Byrne, Assistant Regional Planner

Re: Regional Snapshot Report: Business Location Decisions

Understanding the factors that drive business location decisions is vital for CMAP to prioritize investments, strategies, and policy recommendations in the *GO TO 2040* plan. We would like our plan to recommend a “short list” of actions that the region could take to make us economically competitive through the attraction and retention of businesses, among other goals. Findings from our research on the drivers of business location decisions will help us to prioritize recommendations in the plan, as well as ensure that our research direction is helping us to understand these topics. Thus, the purpose of this report is to:

- Evaluate the relative importance of a variety of local or regional factors to the choices of firms when they decide to move or stay. This evaluation is based upon review of available research and interviews with local experts in the business of site selection.
- Analyze existing conditions and recent trends regarding the geographic location patterns of particular industry types within the Chicago metropolitan area. Industry types analyzed so far include 1) manufacturing, 2) professional, scientific and technical services, 3) health care and education, and 4) transportation and warehousing.
- Provide a short list of suggested courses of action for *GO TO 2040*. These courses of action should reflect the factors most important to firms making either inter-regional or intra-regional location decisions.

ACTION REQUESTED: Discussion of the substance and future direction of this project.

Overall Factors and Trends Influencing Business Location Decisions

Business location decisions are driven in large part by a region's bundle of infrastructure, services, workforce, and amenities. The Chicago metropolitan area is home to a large number of business leaders, civic organizations, and practitioners who have discussed the most essential factors to attracting and retaining businesses. The following represents a preliminary framework for understanding some of the important drivers to these location decisions:



Given the emergence of new global markets and rapid advances in technology and telecommunications infrastructure, businesses now have a much wider range of choices in terms of where to locate various functions. While manufacturing may take place in a developing country to take advantage of cheap labor, back-office operations may be located in a suburb within a metropolitan area, imbued with cheaper real estate and highly skilled labor. Headquarters may seek to locate in the downtown of a large global city with an international airport and cultural amenities, while research and development may seek to locate near major research universities and other similar firms.

Technology itself has allowed businesses to weed through a wide variety of variables and factors regarding optimal locations. Depending on the type of business and the preferences of the executive, businesses can analyze the costs and benefits of a variety of different locations based on factors such as labor markets, housing, transportation, tax rates, public services, and so on.

CNA (Chicago Loop): site selection factors included: "...the building's close proximity to DePaul University and other colleges; the generous TIF package offered by the City; convenient access to bus and rail transit; proximity to company employees; and the opportunity to renovate and manage a landmark facility..." -Steve Pontarelli (via World Business Chicago).

In addition, a growing consensus has emerged among business leaders, civic organizations, and academics regarding the policy priorities for increasing overall metropolitan prosperity. Given

real constraints on budgetary outlays for economic development programs, a significant number of recent studies have recommended that all levels of government seek to focus investment on education, training and infrastructure¹, rather than firm-specific subsidies. Since the evidence indicates that these are the main factors driving firm location decisions, it is sensible that federal, state, and local governments prioritize their investments to match.

Inter-Regional versus Intra-Regional Factors for Business Locations

The business location decision can be understood in two separate dimensions. Mobile firms typically choose to relocate (or remain) either 1) among distinct regions (“interregional location decision”) or 2) among different places

EA Sports Headquarters (Chicago River North): “Chicago is filled with cool neighborhoods...there’s something for every kind of lifestyle...We looked at Austin, Texas but it is hard to find a city that stacks up to Chicago. I can walk from my office and see something cool just about anywhere I go”. –Kudo Tsunoda

within the same region (“intra-regional location decision”). The contributing factors to each kind of decision often differ. While interregional location decisions are typically based upon the kind of factors which ignore jurisdictional boundaries (e.g.

quality of the regional workforce, regional transportation infrastructure, schools, access to other suppliers or consumers, general levels of business taxation (typically state taxes), the climate (both in terms of business and the weather), as well other amenities (e.g. parks, the opera), intra-regional location decisions are typically more tied to the amenities of a particular site or jurisdiction. As a result, different factors (small differences in local tax incentives, site readiness, cost and availability of utilities) play a more significant role in intra-regional location decisions than in inter-regional location decisions.

The following table summarizes what CMAP has learned, both from available research and from local experts in the field, regarding “inter” as opposed to “intra” regional location decisions. Obviously, every situation is different, and while these factors understandably vary in importance from firm to firm, it is worthwhile to 1) list some of the major factors which emerge again and again; 2) document which types of firms may be more responsive to the different factors; and finally 3) whether the factor achieves more relative importance in an intra-regional or an interregional decision. While some of these factors arise from academic literature (especially the wealth of literature which has assessed the impact of state and local taxes and services on business investment), most arise from qualitative assessments made by business leaders and site selection survey results about what actually drives the site selection process from the business perspective.

IKEA Warehousing (Joliet): “We needed to find a site of 50 to 100 acres zoned for distribution that allowed a height requirement of 100 feet. We also needed a rail line nearby. When we considered all the important factors, it became clear that the Greater Chicago area was a good choice. Plus we liked the industrial vision of the City of Joliet.” – Joseph Roth

¹ Recent studies echoing these sentiments include the Progressive Policy Institute Technology Project, the Chicago Council on Global Affairs’ *The Global Edge: An Agenda for Chicago’s Future* (2007), and the Brookings Institution’s *Blueprint for American Prosperity* (2008).

Location Factor	Impact on Inter-Regional Business Location Decision (within U.S.)	Impact on Intra-Regional Business Location Decision	Becoming More or Less Important?	Location Factor is of Greatest Importance to...
Quality of Workforce (Educational Attainment, Firm-Specific Skills)	High	Medium	↑	R&D, Technology Firms, High Tech Manufacturing, Professional Services, Company Headquarters
Cost of Workforce (Wages)	Medium	Low	↓	Lower-skilled services, lower skilled manufacturing, call centers.
Proximity to workforce	Low	Medium	↑	Offices and industrial firms with many employees
Tax Rates and Abatements	Low	Medium	↓	Retail, some manufacturing, some services
Quality of Air, Highway and Freight Infrastructure	High	Medium	↑	Company headquarters, transportation & warehousing, retail, manufacturing
Proximity to Public Transportation	Medium	Medium	↑	Offices and industrial firms with many employees
Proximity to Related Industries (Industry Clusters)	Medium	Medium	↑	Knowledge-based industries, high-technology firms
Quality of Telecommunications Infrastructure	Medium	Medium	↑	Laboratories, Universities, R&D,
Physical Characteristics and Dimensions of the Site	Low	High	?	Primarily large industrial and offices
Energy Costs	Medium	Low	↑	?
Cultural and Recreational Amenities	?	?	?	Headquarters, Knowledge-based and "creative-class" industries.

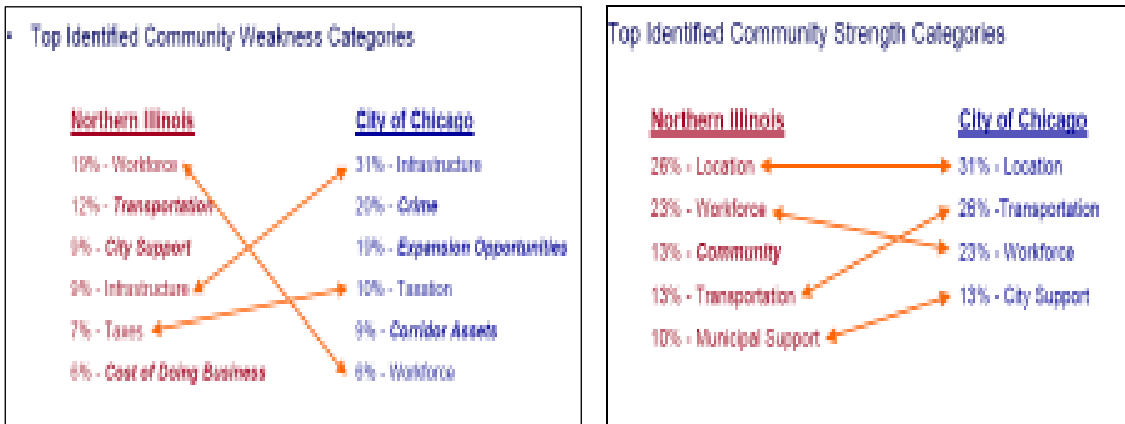
Based on the preceding evaluation, it appears that a wide variety of firms place an increasing emphasis on the regional workforce and what the surrounding regional infrastructure provides in terms of moving goods, people, and information quickly and efficiently. Since many of these factors are metropolitan-wide instead of localized, these factors do not necessarily enter as much into the intra-regional location decision. Our research has not uncovered much of a priority placed upon state and local tax abatements or incentives in terms of driving inter-regional business location decisions, though it does appear that incentives still have an impact upon intra-regional decisions.

Physical characteristics and dimensions of the site still appear to play a crucial role for firms making intraregional location decisions. Simply put, many firms, both industrial and office alike, simply desire more capacity and are more interested in the characteristics that different sites offer in relation to their cost. For example, programs regarding environmental remediation of brownfields can be thought of as an important "intra-regional" location driver; indeed, available research indicates that these programs may be most effective when generating the desired outcome of shifting a business location from one part of a metropolitan region to another.

Pabst (Woodridge): "Chicago has a very broad and deep labor pool and we have great access to talent here, which is an important factor for us. Chicago is one of the easiest cities to travel in and out of with its two airports. We're 15 minutes from Midway and 25 minutes from O'Hare." – Kevin Kotecki

Identification of Strengths and Weaknesses from Chicago Area Businesses

A recent Com Ed survey asked over 1,500 Chicago metropolitan area businesses to evaluate the strengths and weaknesses of their current locations based upon a variety of different factors including taxation and public services, workforce quality, infrastructure, and crime. While the survey did not ask businesses to prioritize the factors in terms of importance, the results do provide a snapshot of what businesses consider when making choices about location. Some of the results are as follows:



As the results demonstrate, many factors are considered to be *both* strengths and weaknesses simultaneously, depending upon the particular survey response. For example, “workforce” is identified as the number one weakness in the Chicago suburbs but also its number two strength. While these results do not enable CMAP to rank the importance of these factors, the results demonstrate a cross-section of important issues for business location. Whether identified as strengths or weaknesses, the categories of workforce, transportation, physical infrastructure, and “location”, (which CMAP assumes to mean a proximity to suppliers and consumers), arise again and again as important factors across the responses.

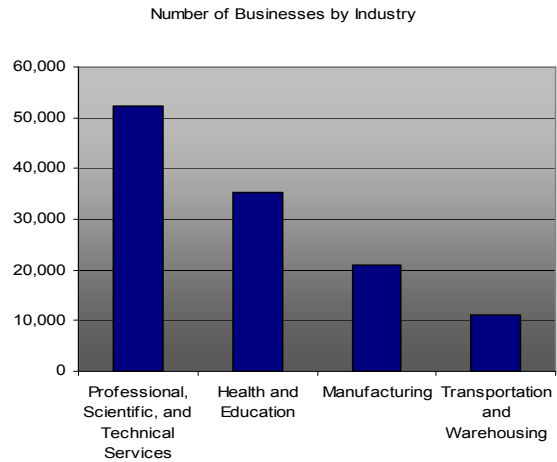
Analysis of Business Locations in the Chicago Metropolitan Area

In order to evaluate location preferences of businesses in our region, and how these compare to the major factors identified through the research and interviews, CMAP staff has performed some preliminary analysis on the location of businesses within the Chicago metropolitan area. CMAP evaluated data on businesses in five major industries, comprising a total of 33% of the region’s total businesses. Industries were grouped according to the two digit NAICS categorization. The industries and examples of the types of businesses included in each category are shown below:

Industry	2- Digit NAICS	Examples of NAICS descriptions
Professional, Scientific, and Technical Services	54	Tax preparation services, law offices, consulting firms, research and development
Transportation and Warehousing	48-49	Freight trucking, storage, charter bus industry, taxi service

Health Care, Social Assistance, and Educational Services	61-62	Trade schools, hospitals, medical laboratories, educational support services, child and youth services
Manufacturing	31-33	Paper mills, yarn spinning mills, tortilla manufacturing, cement manufacturing, iron and steel forging

Health Care and Social Assistance is grouped with Educational Services,² partly because both industries have similar workforce and infrastructure needs. The number of businesses in each industry as of June 2008 is shown in the chart to the right, and the number of employees in each industry between 1990 and 2005 is shown on the following page. The major changes include the decline in the manufacturing sector and the simultaneous and nearly matched increase in the health and education sector. Employment in the transportation and warehousing industry has remained stable with little growth, while the professional, scientific, and technical services industry saw a steady increase from 1993 to 2001, declined in the early part of the decade, and appears to have regained strength. Understanding the strength and prominence of each industry and recent trends helps to better understand the existing conditions and plan for future investment in the workforce and infrastructure needs of each.



Source: Dun and Bradstreet, June 2008

In many respects, the Chicago region appears to have embraced the “new knowledge economy” framework, as the data indicates that it has replaced its shrinking manufacturing base with an increasing number of advanced business-professional services and corporate headquarters firms. The Chicago Council on Global Affairs says that Chicagoland has “reinvented itself as a global city, a trading post for ideas and innovation, an exporter of services instead of steel, a crossroads through which pass not only the goods of the globe but its people and their communications.”³

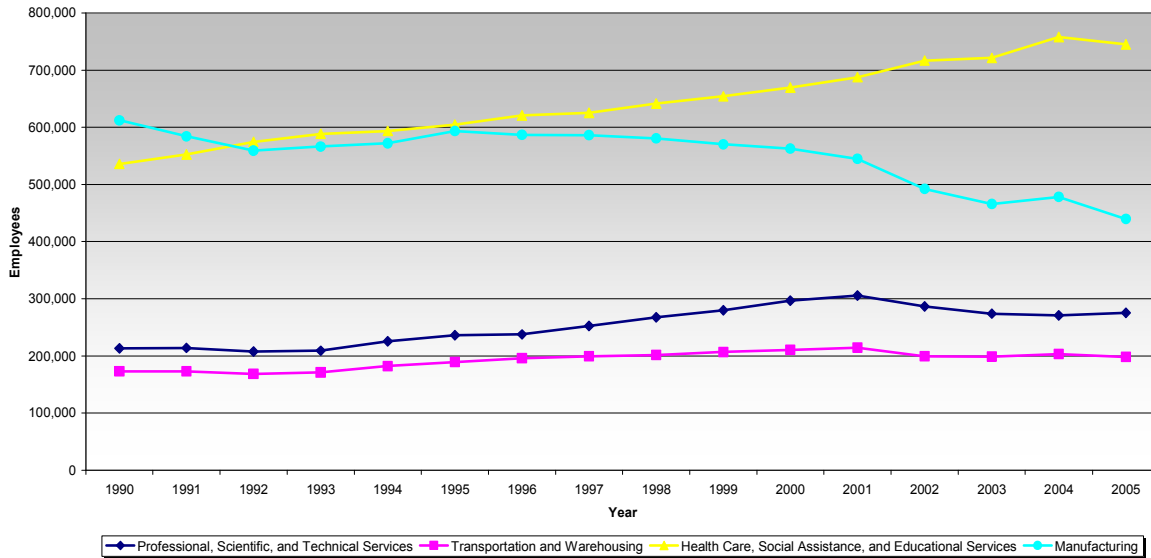
The Federal Reserve of Chicago indicates that the Chicago metropolitan area achieved “robust growth” during the 1990’s in the area of professional services, also noting that the region added 80,000 more jobs in this sector, more than the Los Angeles or New York metropolitan areas⁴. While some have expressed concern that Chicago has become over-reliant on serving the greater Midwest with its professional services as opposed to other global markets, a recent Brookings study by Peter J. Taylor and Robert E. Lang shows that Chicago scores very high in its rankings of “global connectivity” relative to other U.S. and world cities and regions. The results indicate that Chicago’s strength in the new “knowledge economy” sectors should continue to materialize in years ahead.

² Elementary and secondary schools are excluded from this analysis.

³ The Chicago Council on Global Affairs. *The Global Edge: An Agenda for Chicago’s Future*.

⁴ The Federal Reserve Bank of Chicago. http://midwest.chicagofedblogs.org/archives/2007/01/chicagos_pursui_1.html

Average Northeastern Illinois 1st Quarter Employment by Select Industries



Source: Illinois Workforce Information Center

Assessment of these industry locations illustrates trends in the similarities and differences between industry preferences. To help illustrate such trends, CMAP staff utilized business data from Dun and Bradstreet to calculate a particular location quotient. This location quotient compares the concentration of the industry in a smaller geography, a square quarter mile for this analysis, to the concentration of the industry in a larger geography, the seven county region for this analysis.

The map on the following page shows the dominant industries that have a location quotient of 1.5 or greater. This means that the industry is 150% as strong in the quarter section as it is in the region as a whole. The map reveals several areas that have a higher density of different industries. Two of the most prominent areas with a high concentration of specific industries surround both the O'Hare and the Midway airports. Quarter sections within a five mile radius of O'Hare are nearly all dominated by manufacturing and transportation and warehousing. The outer ring of this radius, particularly on the northwestern side, is much more concentrated with professional, scientific, and technical services, as well as the health and education industry. A slightly smaller area surrounding Midway is also highly concentrated with by manufacturing and transportation and warehousing.

Two observations are most evident. Manufacturing and transportation and warehousing businesses locate in close proximity to each other; this may indicate similar infrastructure needs. Additionally, these industries may benefit by being near each other through the outcomes of an agglomeration of industry. The areas surrounding these corridors are extremely well served with transportation; in addition to the airport, interstates 90, 294, and 290 surround the O'Hare airport. Commuter and freight rail is also accessible to this area. Midway is also has multiple interstates and rail lines nearby. This clearly illustrates the importance of transportation to these industries in comparison to the other industries evaluated.

The professional, scientific, and professional services industries and the health and education industries seem to collocate in certain areas. A corridor approximately 15 miles along I-88 and 10 miles wide between I-55 and the Union Pacific West Line has a higher concentration of these types of businesses. Similarly, nearly 20 miles along the lake shore from Evanston to Lake Bluff has a higher concentration of these businesses than the region as a whole.

In addition, the analysis reveals that certain areas in the outer ring suburbs appear to be more diverse in their industry composition than are inner ring suburbs. For example, Aurora shows considerable industrial diversity; the data indicates nearly an

equal number of transportation and warehousing and manufacturing, accounting for 71% of quarter sections in this area. The remaining 29% are nearly equally split between professional, scientific, and technical services and the health and education industry.

As the preceding analysis remains a work in progress, CMAP staff would benefit from any suggestions from the Planning Coordinating Committee regarding further research.

