



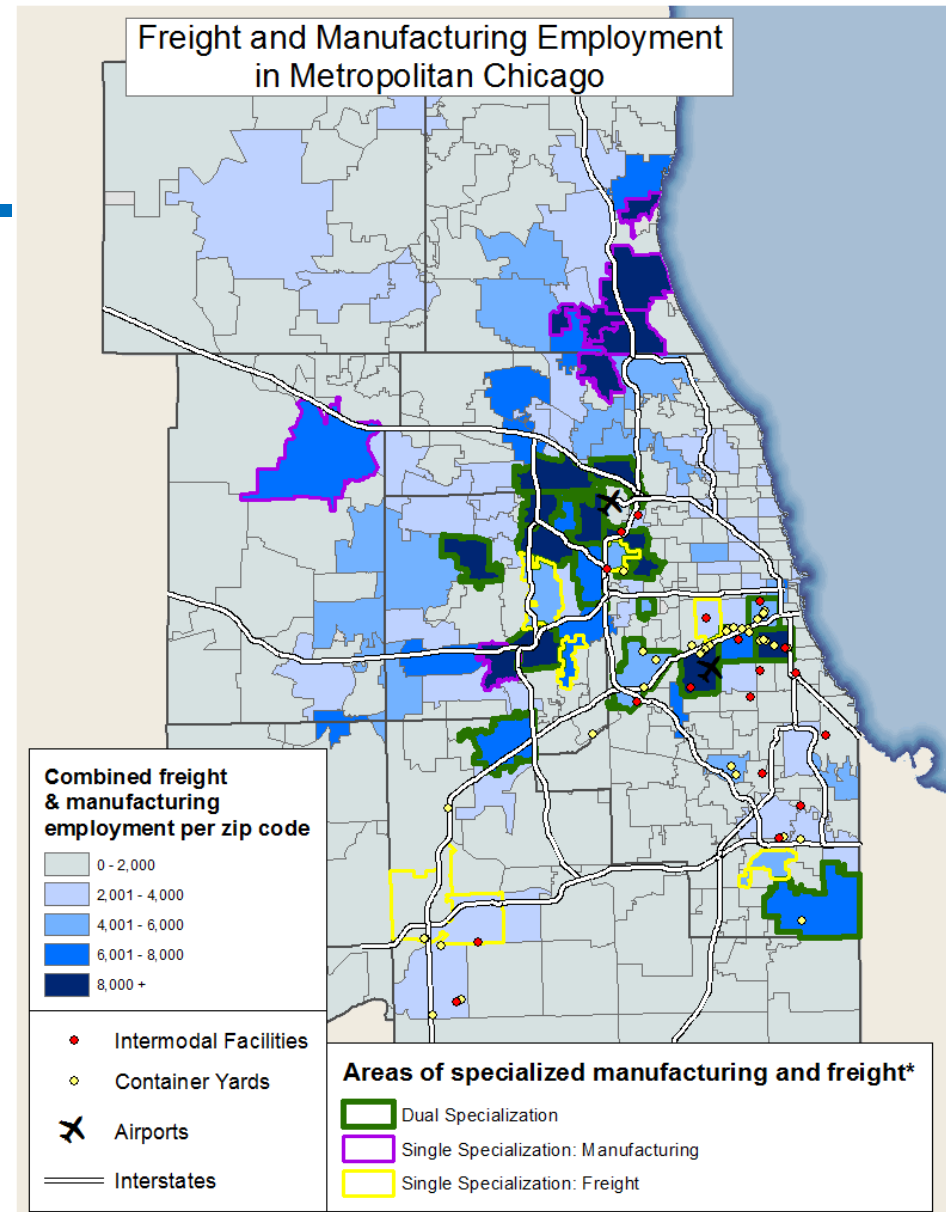
CMAP GO TO 2040

EOWA Local Advisory Committee
O'Hare Subregional Freight-Manufacturing
Drill-Down

April 14, 2014

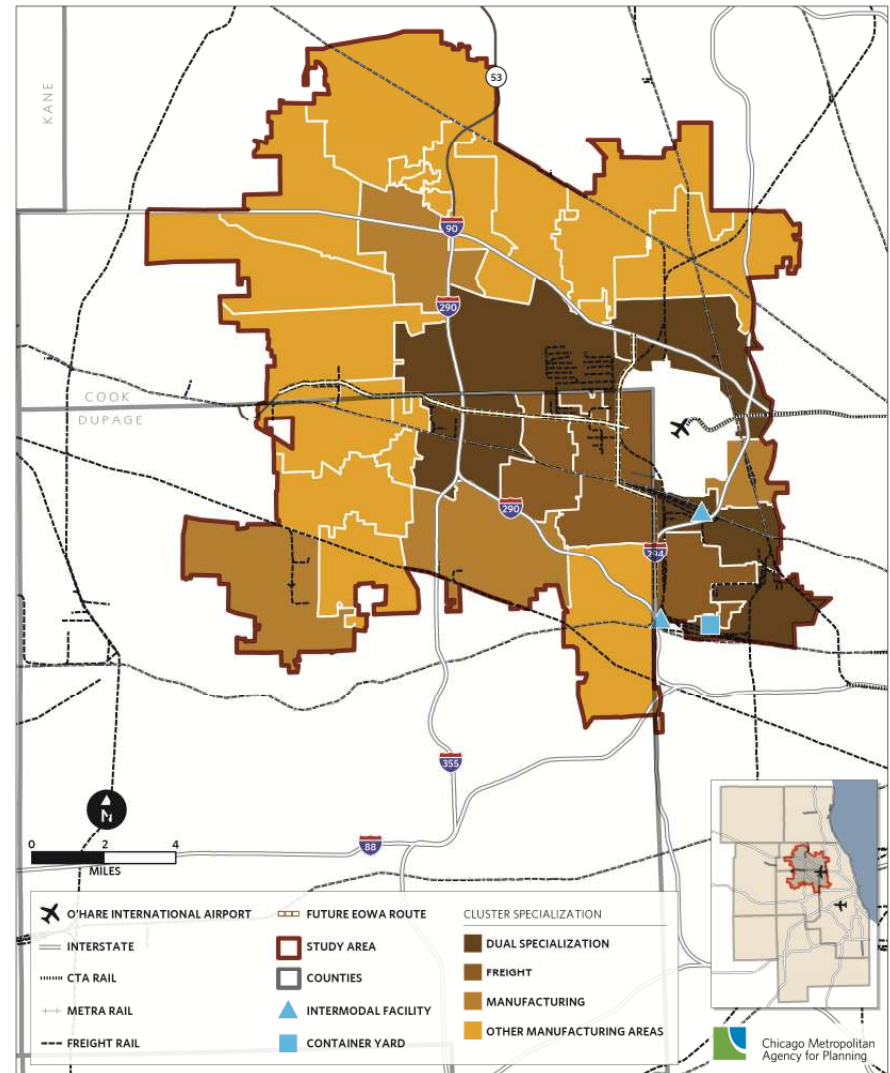
Background

- Build on the freight-manufacturing nexus report recommendations
- Assess local influences on the success of the freight and manufacturing cluster in the O'Hare subregion:
 - Workforce trends
 - Infrastructure networks
 - Planning initiatives & land use trends



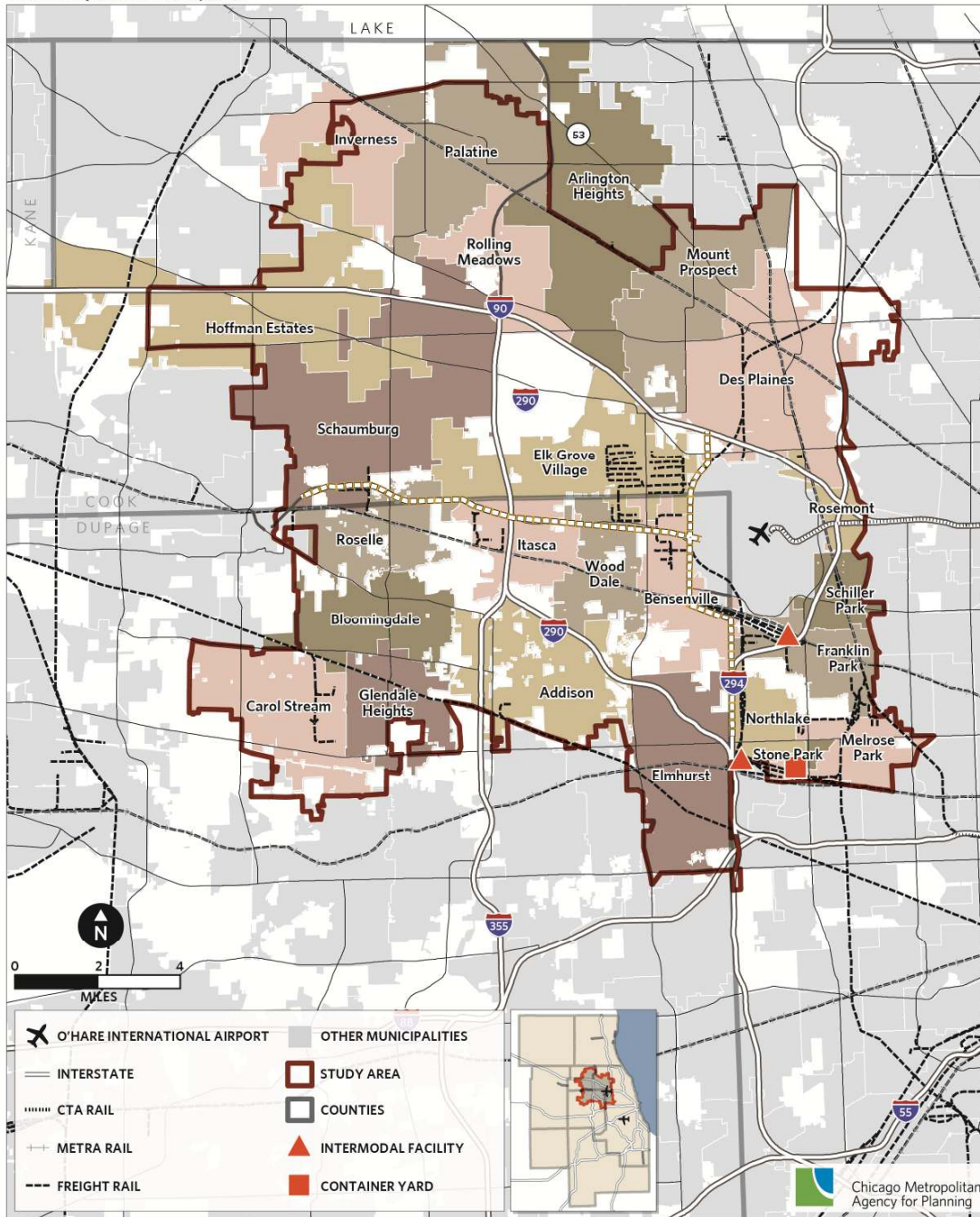
The O'Hare subregion is a regional node for freight and manufacturing

- High specialization of freight and/or manufacturing is closest to O'Hare
- Manufacturing activity is distributed throughout the subregion
- Specialization defined by:
 - Total cluster employment
 - Proportion of employment in freight or manufacturing



Note: "Other manufacturing areas" do not meet the Freight-Manufacturing Nexus benchmarks for freight or manufacturing employment, but still have a significant amount of manufacturing employment. Source: Chicago Metropolitan Agency for Planning analysis of Economic Modeling Specialists International, Census, and Illinois Department of Transportation data.

O'Hare study area and municipalities



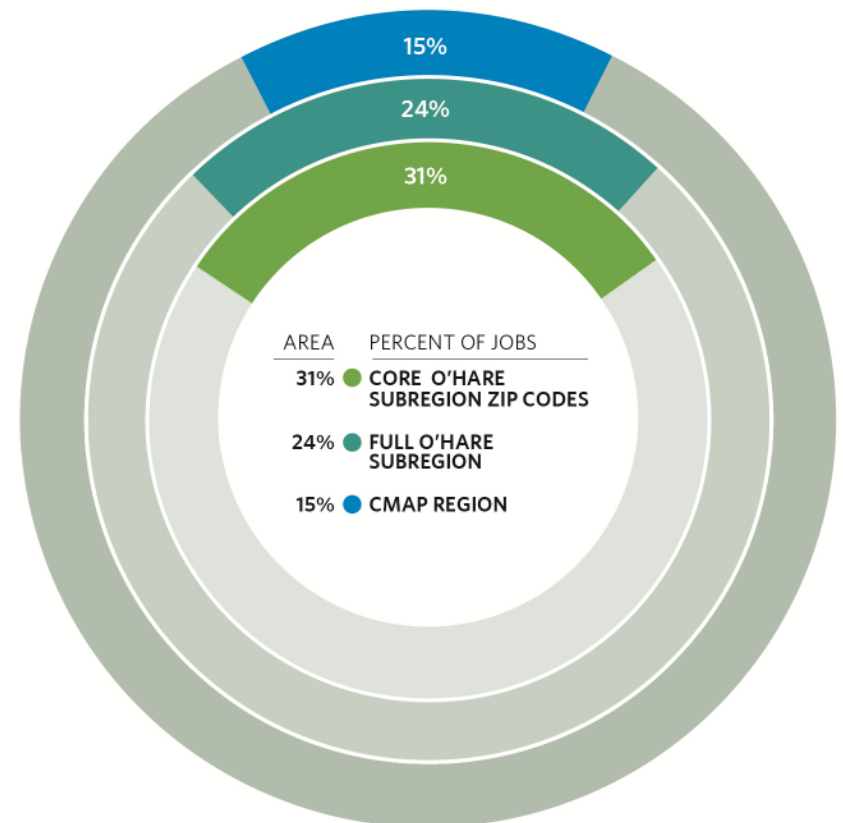
Note: The study area boundary is based on zip codes due to the availability of economic data. Municipalities are shown for reference.
Source: Chicago Metropolitan Agency for Planning analysis of Economic Modeling Specialists International, Census, and Illinois Department of Transportation data.

- Two counties, 24 municipalities, and 26 zip codes
- Multijurisdictional opportunities and challenges

The subregion's freight/manufacturing cluster

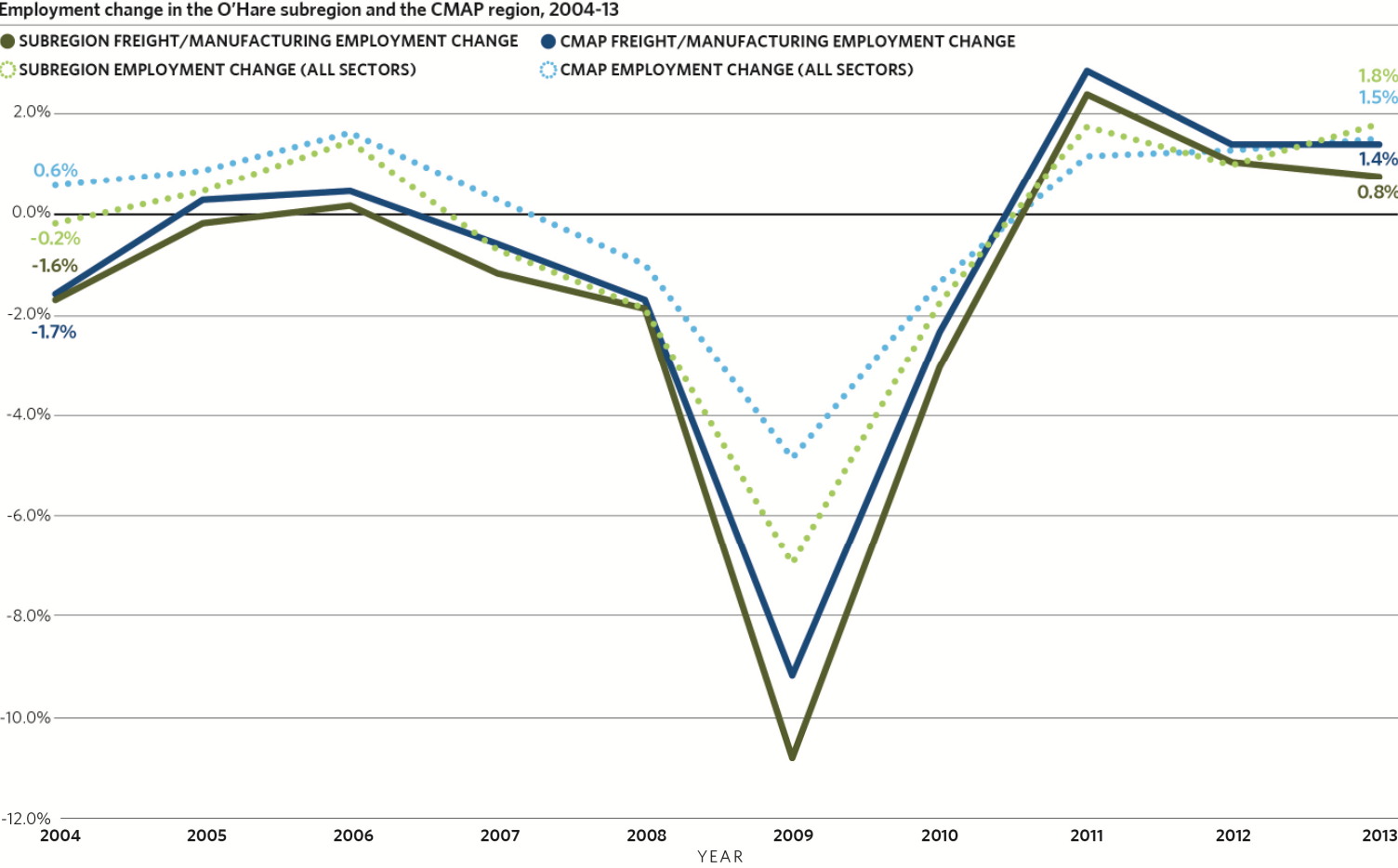
- 131,000 total jobs
- Freight cluster has grown 8.6% since 2003
- Manufacturing cluster has declined 16.3% since 2003, but has grown 3.6% since 2010

Freight-manufacturing job concentration



Source: Chicago Metropolitan Agency for Planning (CMAP) analysis of Economic Modeling Specialists International (EMSI) data.

Subregion freight and manufacturing employment on the rise again, but lagging the region



Source: Chicago Metropolitan Agency for Planning (CMAP) analysis of Economic Modeling Specialists International (EMSI) data.

Freight-manufacturing jobs requiring higher education levels have been more resilient



CARGO AND FREIGHT AGENTS

2013 JOBS: **2,536**


AVERAGE HOURLY PAY: **\$20.29**

EDUCATION REQUIREMENT:
Short-term on-the-job training

↑ 2003-13
JOB CHANGE: **+700**

PERCENT CHANGE: **+38%**

↑ 2013-23 JOB
GROWTH FORECAST: **+20%**



TEAM ASSEMBLERS

2013 JOBS: **5,752**


AVERAGE HOURLY PAY: **\$12.79**

EDUCATION REQUIREMENT:
Moderate-term on-the-job training

↓ 2003-13
JOB CHANGE: **-1,465**

PERCENT CHANGE: **-20%**

↓ 2013-23 JOB
GROWTH FORECAST: **-12%**



SOFTWARE AND APPLICATION DEVELOPERS

2013 JOBS: **1,846**

AVERAGE HOURLY PAY: **\$43.62**

EDUCATION REQUIREMENT:
Bachelor degree

↑ 2003-13
JOB CHANGE: **+380**

PERCENT CHANGE: **+26%**

↑ 2013-23 JOB
GROWTH FORECAST: **+25%**



PRINTING PRESS OPERATORS

2013 JOBS: **1,692**

AVERAGE HOURLY PAY: **\$18.31**

EDUCATION REQUIREMENT:
Moderate-term on-the-job training

↓ 2003-13
JOB CHANGE: **-1,072**

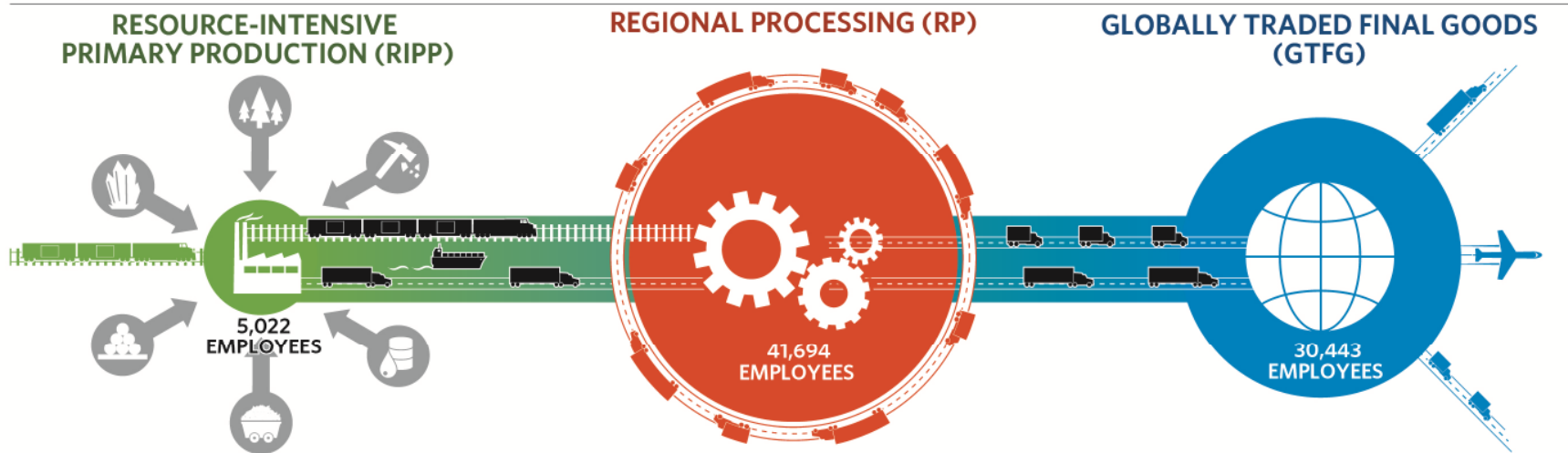
PERCENT CHANGE: **-39%**

↓ 2013-23 JOB
GROWTH FORECAST: **-35%**

Source: Economic Modelling Specialists International.

The freight-manufacturing nexus: freight mode choices among manufacturers

The freight-manufacturing nexus in the O'Hare subregion



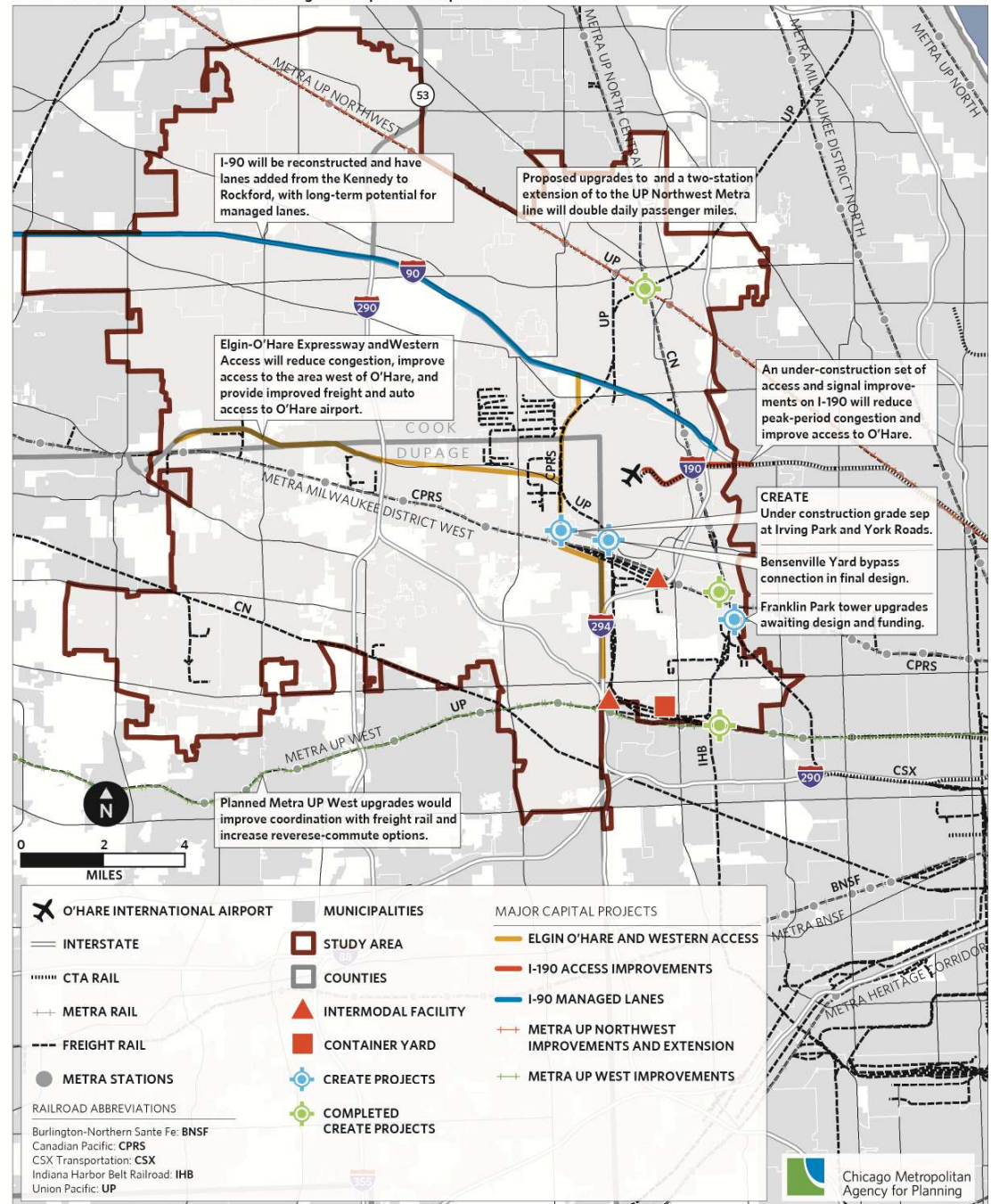
DESCRIPTION:	Refine raw material (e.g., wood to paper)	Create intermediate goods (e.g., fabricated metals) or regionally consumed goods (e.g., food)	Utilize regionally and internationally produced intermediate goods to create final products
INDUSTRIES:	Wood, paper, petroleum, primary metals	Food and beverage, fabricated metals, chemicals	Computer parts, medical supply, machinery
FREIGHT MODE CHOICE:			
TRANSPORTATION AND LOCATION DETERMINANTS:	Low transportation costs and proximity to supply chain	Regional processing: time to market Intermediate parts: supply chain connections	Reliability, flexibility, export access
TENDENCY TO CO-LOCATE WITH FREIGHT:	High	High	Moderate
PRODUCT VALUE DENSITY:	\$430 to \$1,249 per ton	\$904 to \$3,135 per ton	\$6,865 to \$16,670 per ton
SUBREGION PROPORTION OF CMAP REGION EMPLOYEES IN PRODUCTION TYPE:	14%	22%	23%

Source: Chicago Metropolitan Agency for Planning analysis of Economic Modeling Specialists International and Wial et al. "Why Does Manufacturing Matter?," 2012.

Opportunity from Planned Transportation Improvements

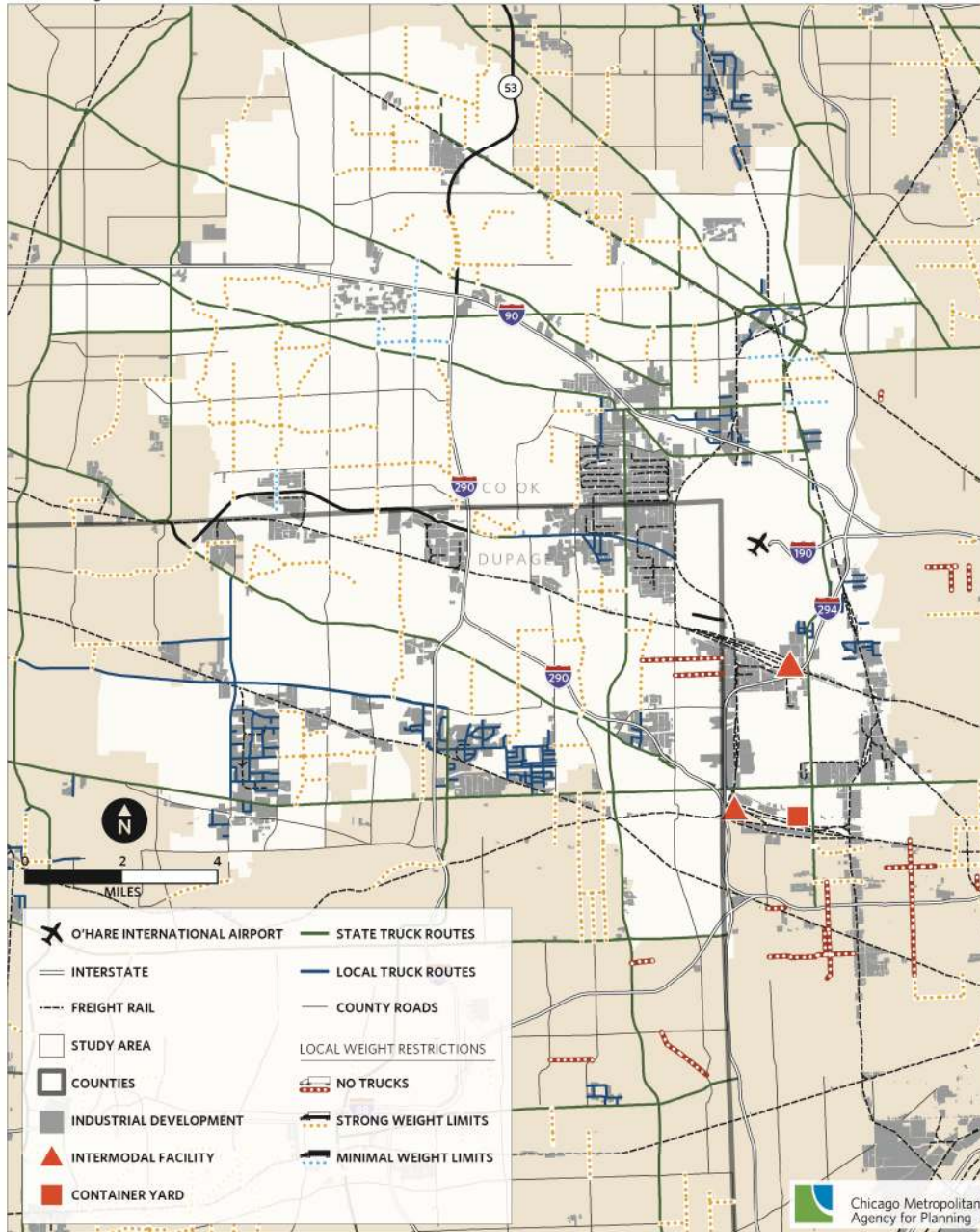
- Improvements should reduce congestion for freight and auto movements
- Some local improvements face planning and funding challenges

Planned and under construction O'Hare subregion transportation improvements



Source: Chicago Metropolitan Agency for Planning analysis of Illinois Department of Transportation, Tollway, Metra, and CREATE project data, 2014.

O'Hare subregion local truck routes and restrictions



In Illinois, roads are assumed to carry 80,000 lbs (the weight of a fully-loaded semi truck) unless they have signage restricting weight. Many county roads are not designated truck routes, and can carry trucks, although they may have some level of dimension or weight restriction. For weight restrictions, CMAP categorized local government data on weight restrictions into three categories. Roads listed as no trucks or allowing less than 5,000 lbs were categorized as "No Trucks." Roads allowing weights from 5,000-60,000 lbs were categorized as "Strong Weight Limits." Roads allowing from 60,000 to 78,000 lbs were categorized as "Minimal Weight Limits." Overweight trucks would be required to obtain permits from affected jurisdictions.

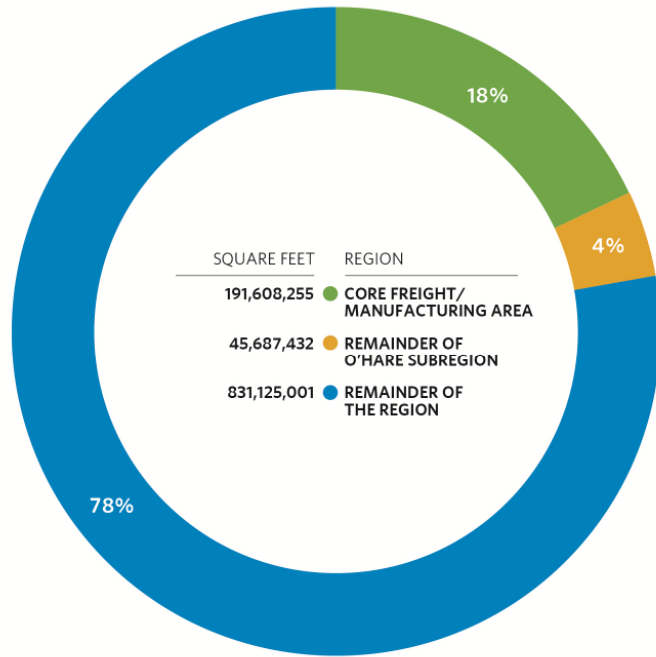
Source: Chicago Metropolitan Agency for Planning staff analysis of municipal and county codes, Illinois Department of Transportation data, and Google Earth data.

Multijurisdictional Infrastructure Needs

- ❑ Truck routing is inconsistent and fragmented
- ❑ Local road conditions are strongly affected by truck freight
- ❑ Consistent flooding and drainage issues impact businesses

The subregion is a center of industrial activity in the region

Distribution of industrial square footage in the CMAP Region

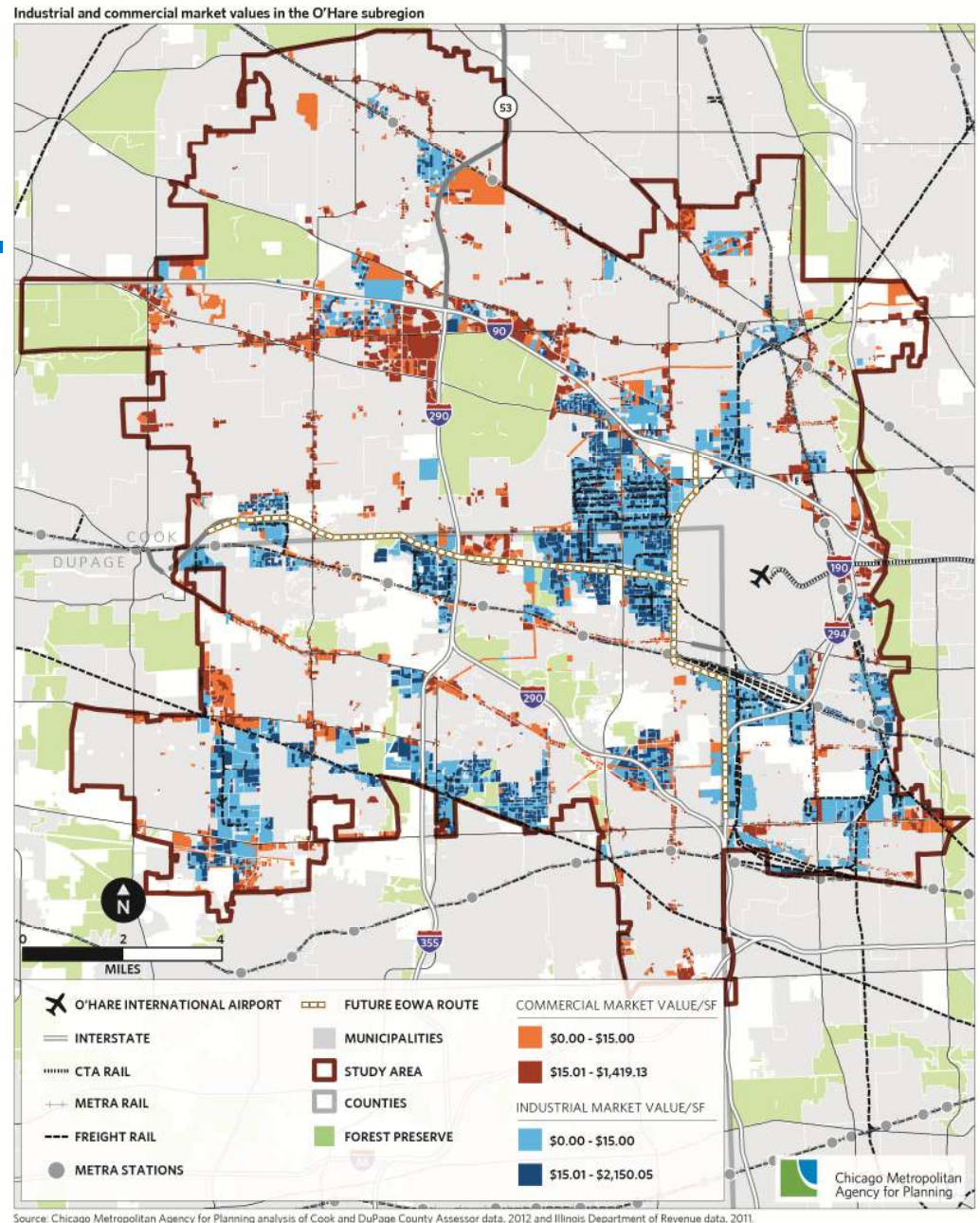


Source: Chicago Metropolitan Agency for Planning Analysis of CoStar data, 1st quarter 2014.

- Despite an aging building stock, the subregion attains normal vacancy rates and high rents
- Access to transportation amenities and a trained workforce are significant draws
- Property tax classification in Cook County has an impact

Potential for major land use change

- Some municipalities envision a transition to office and retail uses after the EOWA
- FHWA height limits will play a role
- Industrial space is critical to support the freight and manufacturing clusters in the region



Moving the O'Hare freight and manufacturing cluster forward

□ **Support workforce training:**

- ▣ Continue to improve connections between employees, training programs and employers
- ▣ Assess the needs of changing industries in the subregion

□ **Coordinate stormwater planning:**

- ▣ Designate key actors
- ▣ Identify the drivers of recurring flooding issues
- ▣ Develop multijurisdictional solutions and an implementation plan

Moving the O'Hare freight and manufacturing cluster forward, cont'

- **Plan for truck routing and infrastructure improvements**
 - ▣ Plan for truck routing across jurisdictions
 - ▣ Identify key improvement needs to streamline access and address existing roadway deficiencies

- **Develop a multijurisdictional industrial redevelopment plan**
 - ▣ Identify the most critical freight/industrial areas
 - ▣ Lay out a multijurisdictional framework and strategies for industrial preservation and redevelopment

An aerial night view of a city with a glowing network of roads and streets. The city is illuminated with bright white and blue lights, creating a complex web of lines across the dark landscape. The background shows a dark blue sky and a body of water on the right side.

Questions?

Elizabeth Schuh, AICP

Senior Policy Analyst

Email: eschuh@cmap.illinois.gov