ON TO 2050 LOCAL STRATEGY MAP APPENDIX

CMAP

Contents

Introduction

An overarching goal in the development of ON TO 2050 is to provide specific, actionable guidance to local implementers for key policy areas. For ON TO 2050, this has entailed the development of local strategy maps (LSMs), which visually depict a range of plan topics relating to recommendations of the plan, such as areas susceptible to flooding, transit needs and opportunities, or Economically Disconnected Areas (EDAs). LSMs enable partner agencies such as counties, municipalities, transportation implementers, and others to understand how ON TO 2050's broad regional policies apply to their local context. CMAP plans to provide more detailed local guidance to address the issues shown by LSMs as an implementation activity post-plan adoption. This document contains an overview of CMAP's general approach to LSMs as well as details for each LSM included in ON TO 2050.

Local Strategy Map Development Process

To better understand potential place-based recommendations processes, CMAP staff reviewed approaches used by peer MPOs and identified two approaches -- typologies and layers -- as options for consideration.

Place-based approach	Definition	Purpose
Typologies	Designated typologies (typically municipal scale) that group communities together based on like characteristics	Provide regional guidance on local planning, especially regarding land use topics
Layers	Data layers on topics of importance to the agency (may cross political boundaries)	Provide regional guidance to inform local planning on key topics (may expand beyond land use)

Internal analysis and discussion yielded a staff recommendation to move forward with a layers approach (later renamed local strategy maps), which would map data layers associated with particular policy areas of importance to the agency and provide guidance pertinent to local partners and others for each of the selected topics. The layers approach integrated well with the plan development process, allows the plan to speak more specifically about a wide range of topics, and provides valuable data, information, and guidance to partners.

Phase 1: Identification of the ON TO 2050 universe of layers

The initial phase created a universe of layers for consideration, as well as scope for the development of layers that were not under the umbrella of other ongoing plan development tasks. Staff developed a draft list of potential layers based on existing priorities from GO TO 2040 and emerging ON TO 2050 priorities. Related transportation policy areas included: prioritized transportation investments, transportation funding, freight, transit modernization, asset management, highway operations, transportation technology, and non-motorized transportation options. Related environment policy areas included: climate resilience, green

infrastructure, water resources, stormwater, energy, and protection of natural areas. Related land use policy areas included: reinvestment, disinvested areas, agricultural preservation, local food, livability, and housing choice and affordability. Related economic policy areas included: regional economic coordination, economic competition, economic clusters, inclusive growth, economic resilience, tax policy, and community capacity.

Phase 2: Development of local strategy maps for ON TO 2050

To explore the layers concept more concretely, staff developed two "pilot layers" – locally identified priority areas for reinvestment and conservation areas – to explore how the approach might work and estimate the level of effort required to incorporate the layers concept into the plan. The pilot layers were shared with municipalities in a series of municipal outreach workshops to get feedback on the approach and understand how the layers might be most useful to municipalities.

Feedback from committees and stakeholders helped to narrow down the list of potential topics to twenty. The majority of LSMs were developed as part of strategy papers for ON TO 2050; a select few were created outside of strategy development when there wasn't a corollary supporting project. Feedback on the ultimate LSMs included in ON TO 2050 was gleaned through both the strategy development and plan drafting phases.

Phase 3: Development of targeted local recommendations (anticipated)

Following ON TO 2050's adoption, CMAP will build upon the LSMs to develop relevant planning tools and guidance for incorporating the plan's objectives at the local level. This guidance may take the form of guidebooks, toolkits, sample plan or ordinance language, case studies, and/or annotated bibliographies and links. Trainings on LSMs and related recommendations may be performed as well. In addition, staff will explore the development of an interactive online platform to increase the accessibility and utility of the information to stakeholders.

ON TO 2050 Local Strategy Maps

The remainder of the report is divided into sections that correspond to the five chapters of ON TO 2050. Each section includes a discussion of the chapter's LSMs (although several LSMs are related to topics in multiple chapters). The discussion for each LSM includes a high-level summary of its relevance to the plan's recommendations, a description of the data sources and methodology used, and a map of the regional data.

Community Local Strategy Maps

Housing Market Areas

Description:	The housing market areas help municipal officials and staff, policy makers, and other housing stakeholders understand the variation in local housing submarkets, identify where common housing challenges exist across the region, and determine the best strategies to address those challenges. **Related recommendation(s):** Match regional and local housing supply with the types that residents want; Target infill, infrastructure, and natural area investments; Invest in disinvested areas
Methodology:	Through mid-2016, the *Homes for a Changing Region* (CMAP, Metropolitan Planning Council, and Metropolitan Mayors Caucus) team worked closely with DePaul University's Institute for Housing Studies (IHS) to identify the geography and characteristics of eight distinct subregional housing markets across northeastern Illinois. To identify similar areas, or submarkets, IHS employed a data clustering technique to compare -- regardless of physical proximity -- different geographic areas that shared similar traits. Using detailed statistical information regarding housing stock and affordability, housing market activity, resident demographics, and socioeconomic indicators, IHS placed all U.S. Census tracts within the seven-county Chicago region into one of eight groupings, each having similar housing and socioeconomic characteristics. More than 40 different variables fed into the analysis, often from the U.S. Census Bureau or IHS proprietary data. The process grouped together census tracts with the greatest similarities, with different submarkets most commonly defined by age of the housing unit, household income, population growth, and economic hardship indicators such as unemployment and foreclosure.

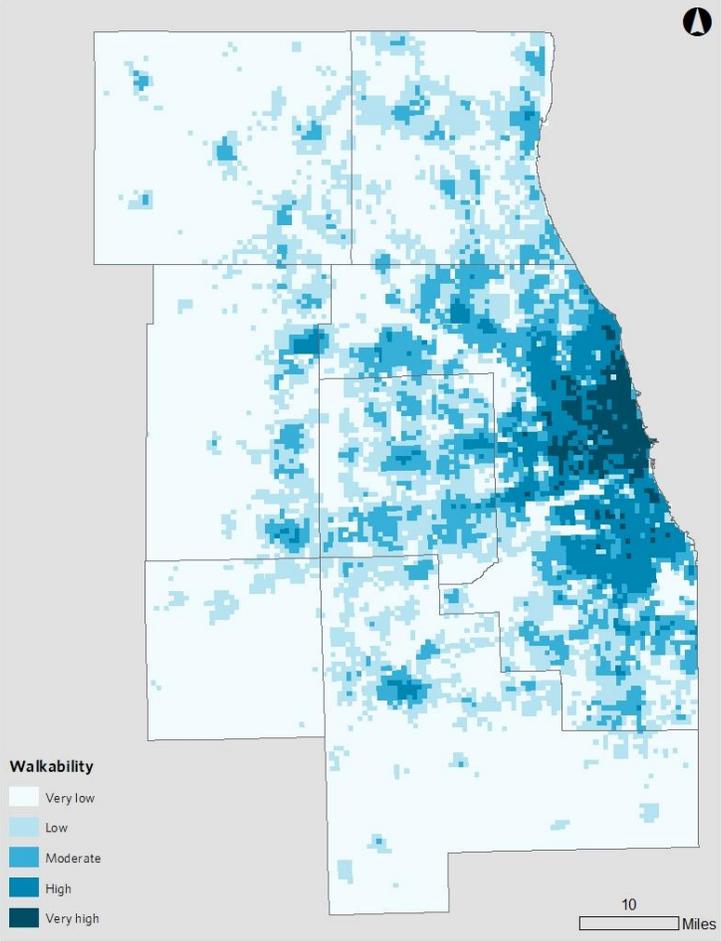|	
	The team also collaboratively developed a website to help local jurisdictions use the market areas in their planning efforts. More information is available at https://www.regionalhousingsolutions.org/
Map:	
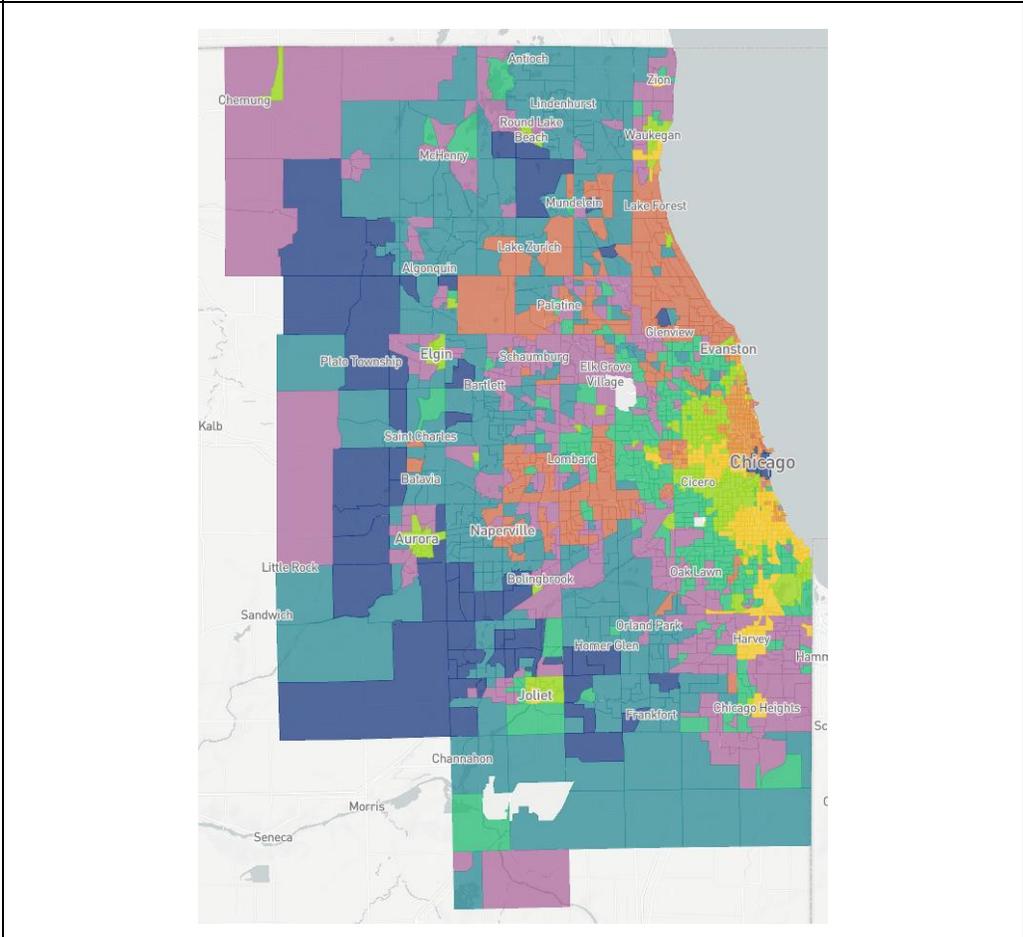
Walkability / pedestrian access

Description:	ON TO 2050 carries forward the GO TO 2040 recommendation to build walkable communities with a variety of services, amenities, and transportation options. Through 2050, continuing to support compact, walkable communities will help the region meet increasing demand for these places, support transit and existing communities, improve the health of residents, and broadly promote a high quality of life. This metric was developed as part of the ON TO 2050 Non-motorized Transportation report to assess the quality of the region's pedestrian environment. Promoting walkable communities as well as non-single occupancy vehicle travel are major recommendations of the plan. This dataset is also used for an ON TO 2050 indicator.

	Related recommendation: Support development of compact, walkable communities; Improve travel safety
Methodology:	CMAP developed a measure of amenities and other characteristics that contribute to a location's overall walkability, within the limitations of available data. Using a 30-minute walkshed from points throughout the region (subzone centroids), the number of amenities (supermarkets, libraries, schools, transit facilities, tree cover, and other points) reachable on foot were counted and assigned scores, and the physical attributes (such as block length, intersection density, population and employment density) were measured and scored for each subzone. The total points from amenities and characteristics were added, and penalties were assigned for areas with fewer than five households and locations with high numbers of fatal or serious bicycle or pedestrian crashes.
Map:	

Economically disconnected areas (EDAs)

Description:	Inclusive growth is a principle of ON TO 2050; ample research[1] demonstrates the regional economic value of inclusive growth policies and processes that combat inequality and promote economic opportunity, particularly for people and places not currently contributing to or benefiting from the region's prosperity. These residents are not well connected to opportunities provided by the region's economy, and, as a result, a substantial portion of the region's human capital -- embodied in the talents and skills of these residents -- is being wasted. To focus efforts to promote inclusive growth, CMAP has identified economically disconnected areas (EDAs), which are places with concentrations of low-income residents who are also persons of color or have limited English proficiency. **Related recommendation(s):** Invest in disinvested areas; Pursue inclusive growth by prioritizing clusters that support regional economic opportunity; Reduce flood risk to people and assets; Use collaborative leadership to address regional challenges; Leverage the transportation network to promote inclusive growth
Methodology:	Using U.S. Census tract-level American Community Survey data, CMAP identified tracts with rates of limited English proficiency or people of color above the regional average. Tracts with over 50.5 percent people of color and tracts with over 12.5 percent limited English proficiency were above the regional threshold. These tracts were compared with median income values. Low-income threshold defined as 60 percent of the median income by family size for the Chicago-Naperville-Elgin MSA. Data by family size came from table B19119 from the 1-year 2014 ACS; 1-person households from table B19019 were also included. Staff identified where median income value was less than 60 percent of the median income by family/HH size, and created the percent low-income by dividing this total by the count of families and 1-person households. Any tract exceeding 5 percent was given a low-income flag. Staff compared all three tract flags and classified tracts as EDA if low-income flag was present AND people of color OR limited English proficiency flag was present, manually removed selected tracts with low residential land use.

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[1] CMAP *Inclusive Growth Strategy Paper* (July 2017)

http://www.cmap.illinois.gov/documents/10180/515753/Inclusive+Growth+strategy+paper/0f01488d-7da2-4f64-9e6a-264bb4abe537

Map:	Economically Disconnected Areas, 2014
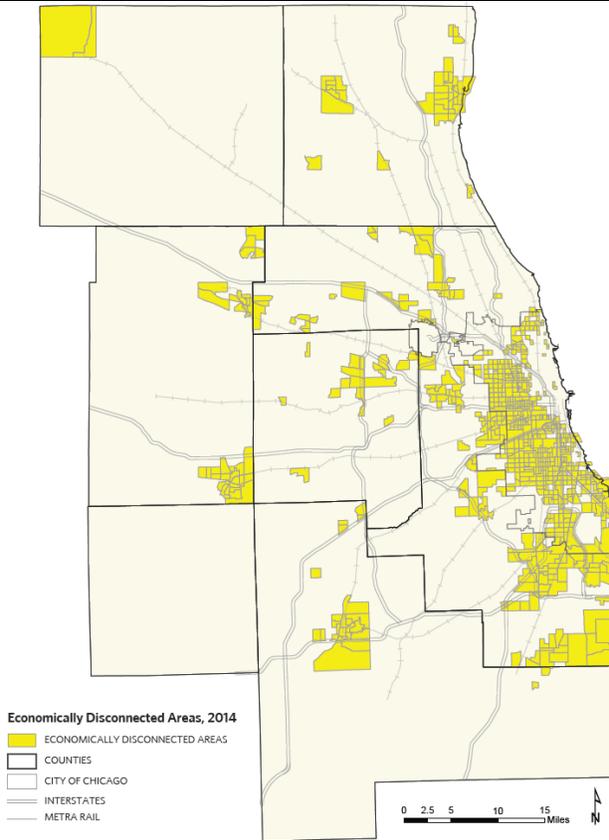
Disinvested areas

| Description: | As part of ON TO 2050 development, CMAP identified disinvested areas within the region. While economically disconnected areas (EDAs) are defined as areas with either a concentration of low-income, minority residents or low-income, limited English speaking residents, disinvested areas are primarily non-residential and exhibit a lack of investment. Together, these communities experience a persistent, long-term lack of market investment, leading to declining property values, taxes, employment, and, frequently, population. Disinvestment often constrains the ability of any individual community to respond effectively to these losses, and high tax rates and low market potential limit private investment. Because disinvested areas so strongly overlap with or fill in gaps between EDAs, these areas are presented together as an aide for planning for reinvestment and economic development.
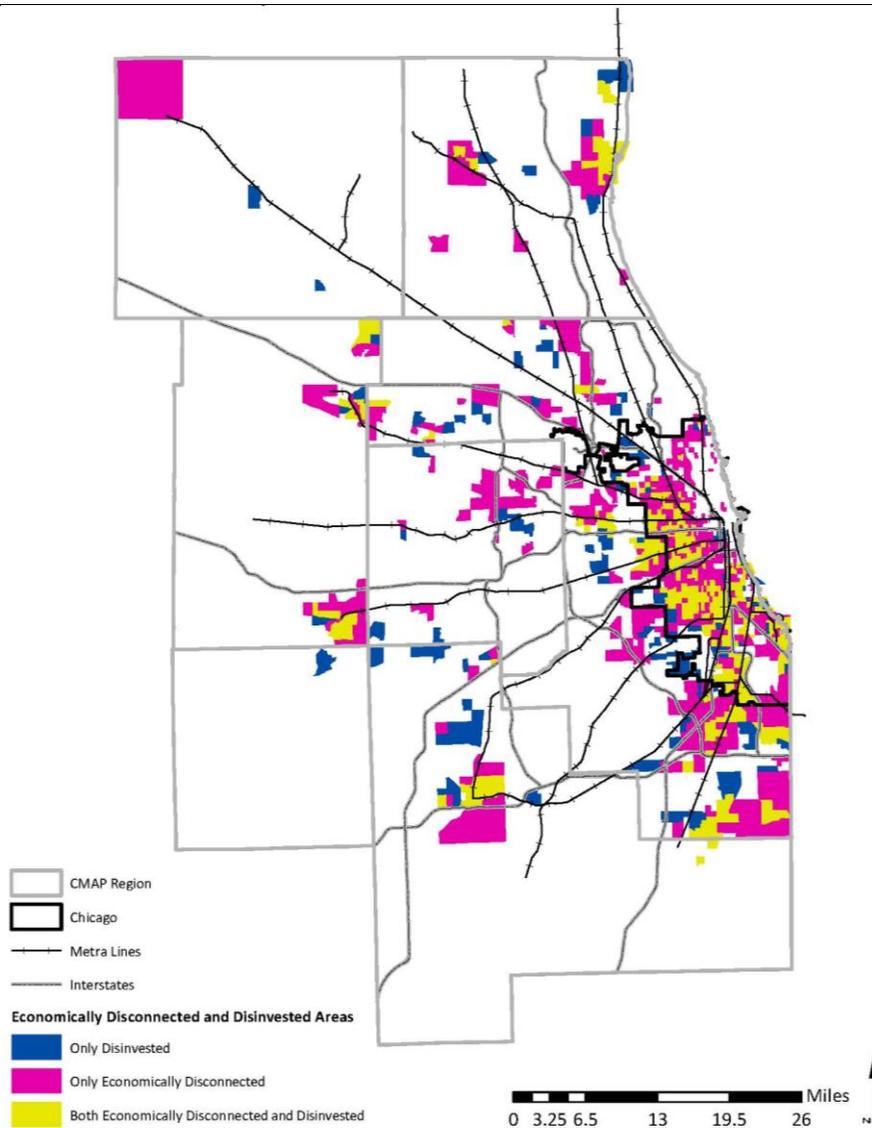
Related recommendation(s): Invest in disinvested areas; Develop tax policies that strengthen communities and the region; Leverage the transportation network to promote inclusive growth |
| --- | --- |

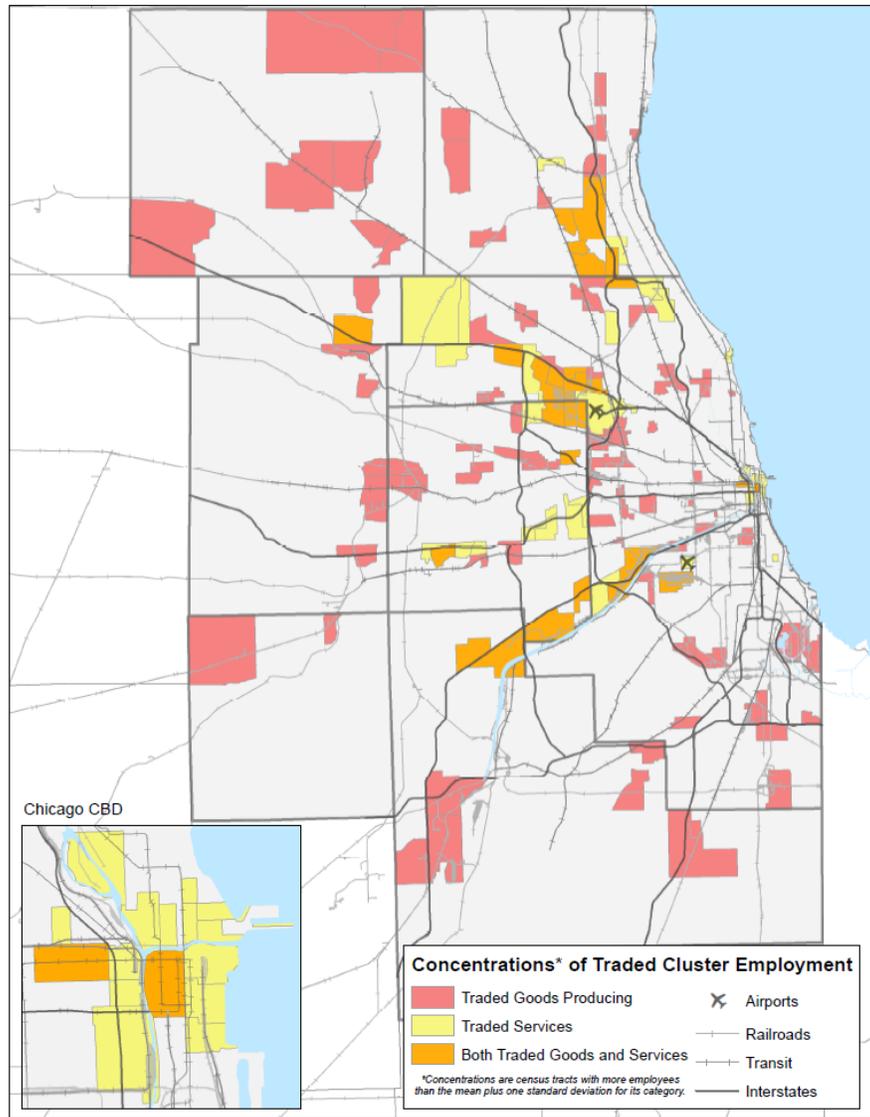|	
Methodology:	This LSM identifies disinvested areas in the region by rating the following categories of disinvestment: nonresidential market values (2 measures), employment (4 measures), and levels of lending to businesses (2 measures). These variables were selected for data availability, years of coverage, and relevance to our definition of disinvestment. Tract filters limited the analysis to predominantly nonresidential tracts with historic business activity. Using data for individual years and across years, the eight measures are calculated for each tract. Each tract's degree of disinvestment ("disinvestment weight") is calculated relative to the rest of the tracts' values across these eight measures.
Map:	

Prosperity Local strategy maps

Traded clusters

Description:	This LSM shows where traded industry clusters are located in high concentrations across the region -- including both goods and service-producing traded cluster industries, by employment. ON TO 2050 recommends supporting the region's traded clusters and aligning local economic development planning with regional goals. Important components of the regional economy span across arbitrary political jurisdictions. The data illustrates this reality and could inform future sub-regional collaboration around economic development. It could also serve as a unit of analysis for understanding the transportation and infrastructure needs of the industries that connect metropolitan Chicago to economies around the world. **Related recommendation(s):** Support the region's traded clusters, Align local economic development with regional goals
Methodology:	Using data from the U.S. Cluster Mapping Project's methodology, CMAP staff classified NAICS6 industries as part of a traded goods-producing, traded services, or local industry cluster. An industry cluster is a regional concentration of related industries, stakeholders, and supportive institutions that gain productive advantages from close geographic proximity and economies of scale. IDES data was used to summarize traded goods-producing and traded services cluster employment levels by census tract. Tracts with a higher concentration of cluster employees than the mean plus one standard deviation were identified as "employment centers." This process was repeated for both trade goods-producing and traded services industries. Four additional tracts were manually added based on Dunn & Bradstreet data and consultation with CMAP staff. One tract with a planned factory closure (and removal of 600 jobs) was removed from the final cluster identification.

Map:

Chicago CBD

Concentrations* of Traded Cluster Employment

Traded Goods Producing	✈ Airports
Traded Services	┼ Railroads
Both Traded Goods and Services	┼ Transit

*Concentrations are census tracts with more employees than the mean plus one standard deviation for its category.

—— Interstates

Source: CMAP analysis of Illinois Department of Employment Security data, 2015

Environment Local Strategy Maps

Conservation Areas

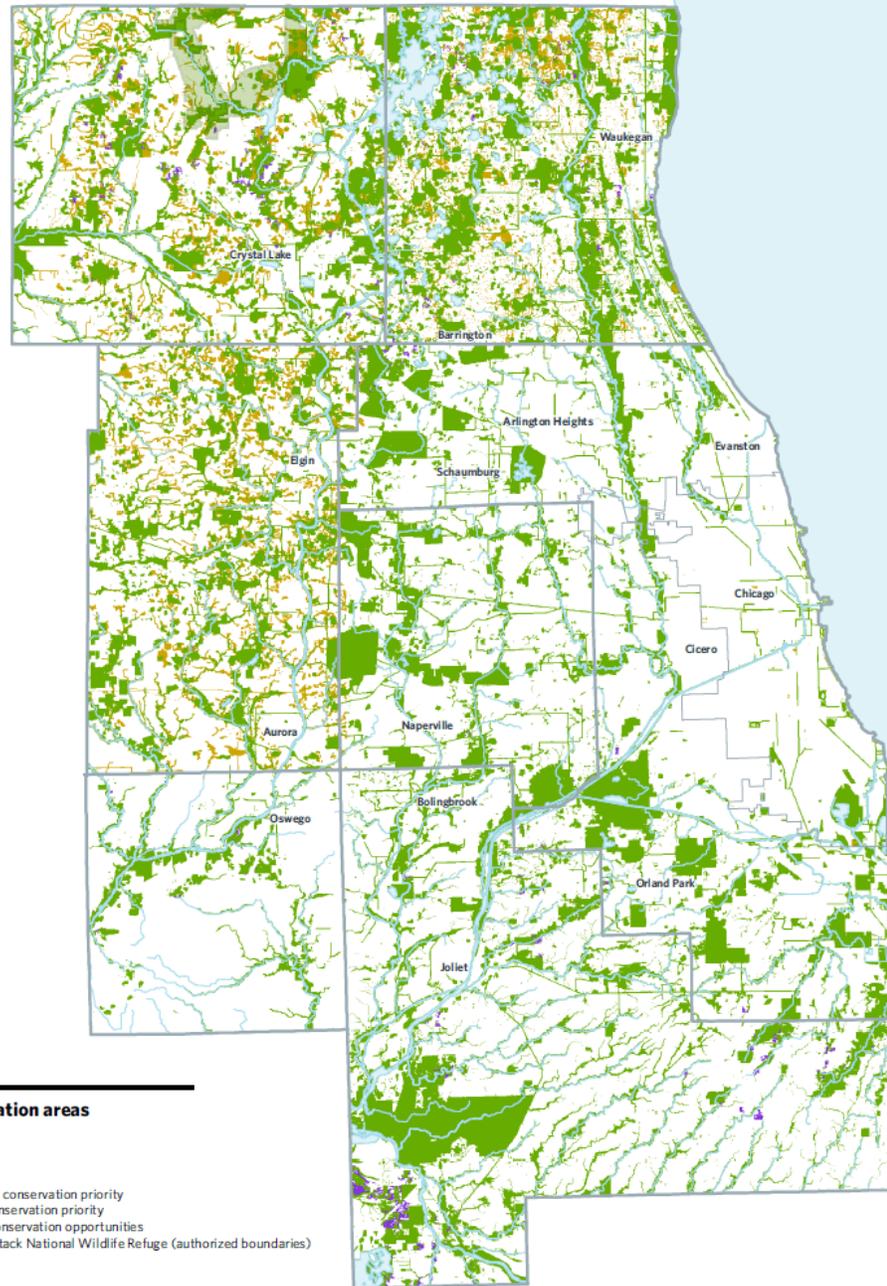|	
Description:	The conservation areas LSM will help stakeholders pursue policies and plans that advance conservation goals and development and investment decisions that are sensitive to conservation objectives. A range of land types within the region, such as wetlands, floodplains, forests, and prairies, provide crucial ecosystem services, habitat, recreational amenities, and other important functions to communities. The conservation areas LSM identifies protected and unprotected areas of the region that reflect local and regional priorities for conservation. This classification differentiates between resource areas that are regionally significant and those additional areas that county entities have identified as important based on local analysis. Because county plans allow for a more detailed analysis of a smaller area, they are able to assess natural resource areas that are significant but may not appear in a regionwide analysis. **Related recommendation(s):** Integrate land preservation into strategic growth efforts
Methodology:	The classification allows the conservation areas LSM to include these locally identified priority resources while distinguishing them from the regional conservation priorities. This approach allowed CMAP to balance local knowledge and regional data so that important resources can be considered even if a county has not had the opportunity to conduct a full green infrastructure study. **Regional Conservation Priorities** include wetlands, 100-year floodplains, protected open space, and unprotected Illinois Natural Areas Inventory (INAI) sites, oaks, prairies, and savannas. Also included are 200-foot buffers around wetlands, INAI sites, prairies, savannas, and oak stands of greater than 10 acres. These resource types were included in almost all prior green infrastructure studies and maps, suggesting a consensus about their significance. The Regional Conservation Priorities also includes 200-foot buffers around surface water, protected open space, and current and programmed trails included in the Regional Greenways and Trails Plan. Regional priorities are included independent of whether they are also part of subregional green infrastructure plans, although most core priority areas are also included in these county plans.

Local Conservation Priorities are environmental resource areas identified in the Kane, McHenry, and Lake County green infrastructure plans that are not part of the Regional Conservation Priorities.

Conservation Opportunities are less significant natural resource areas that were identified in the regional analysis but not included as environmental resource areas in county green infrastructure plans. This set of resources includes non-oak forest patches of greater than 50 acres.

The following data sources were used in the analysis: National Conservation Easement Database, CMAP Land Use Inventory, CMAP Regional Greenways and Trails Program, Illinois Department of Natural Resources, Morton Arboretum on 2010 Oak Ecosystems, Green Infrastructure Vision 2.3, U.S. Fish and Wildlife Service, FEMA, Illinois Natural Areas Inventory.

Map:	

Drinking water source protection

Description:	Water resources are essential for sustaining economic prosperity, environmental health, and quality of life in the region. ON TO 2050 calls on the region to coordinate shared water supply resources for long-term sustainability and identifies strategies that are particularly relevant for specific sources. The drinking water source coordination LSM identifies the different sources of water supply for municipalities in the region in

	recognition of the unique challenges and management needs associated with different sources. **Related recommendation(s):** Coordinate and conserve shared water supply resources
Methodology:	Illinois State Water Supply (ISWS) data was collected on water source and grouped from 8 to 5 categories: shallow groundwater, sandstone groundwater, Lake Michigan, river water, river and groundwater.
Map:	 Chicago Metropolitan Agency for Planning, 2017.

Chicago Metropolitan
Agency for Planning
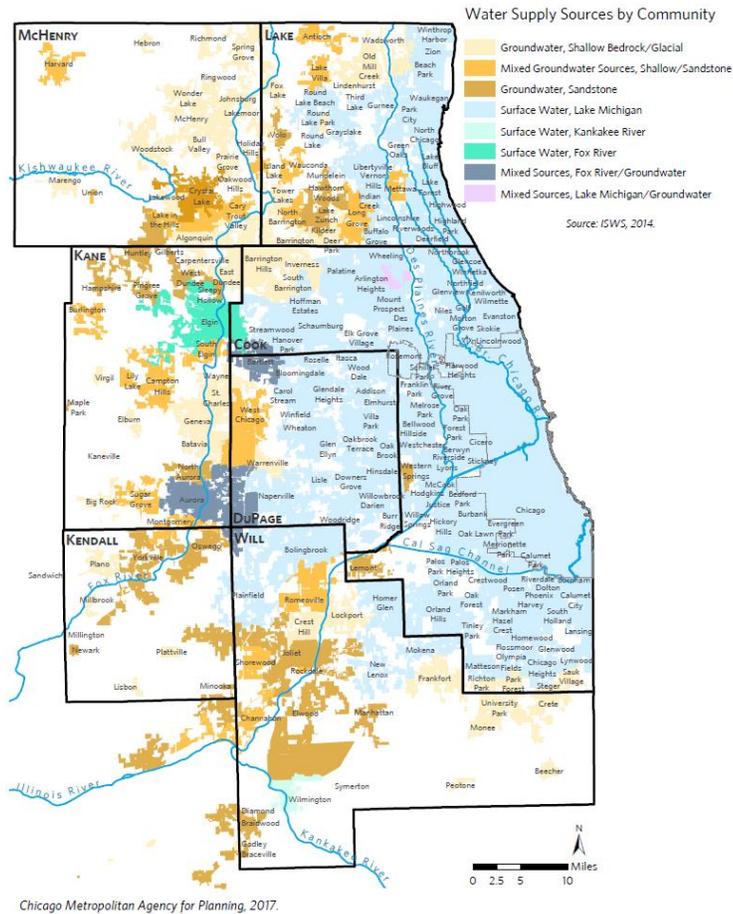
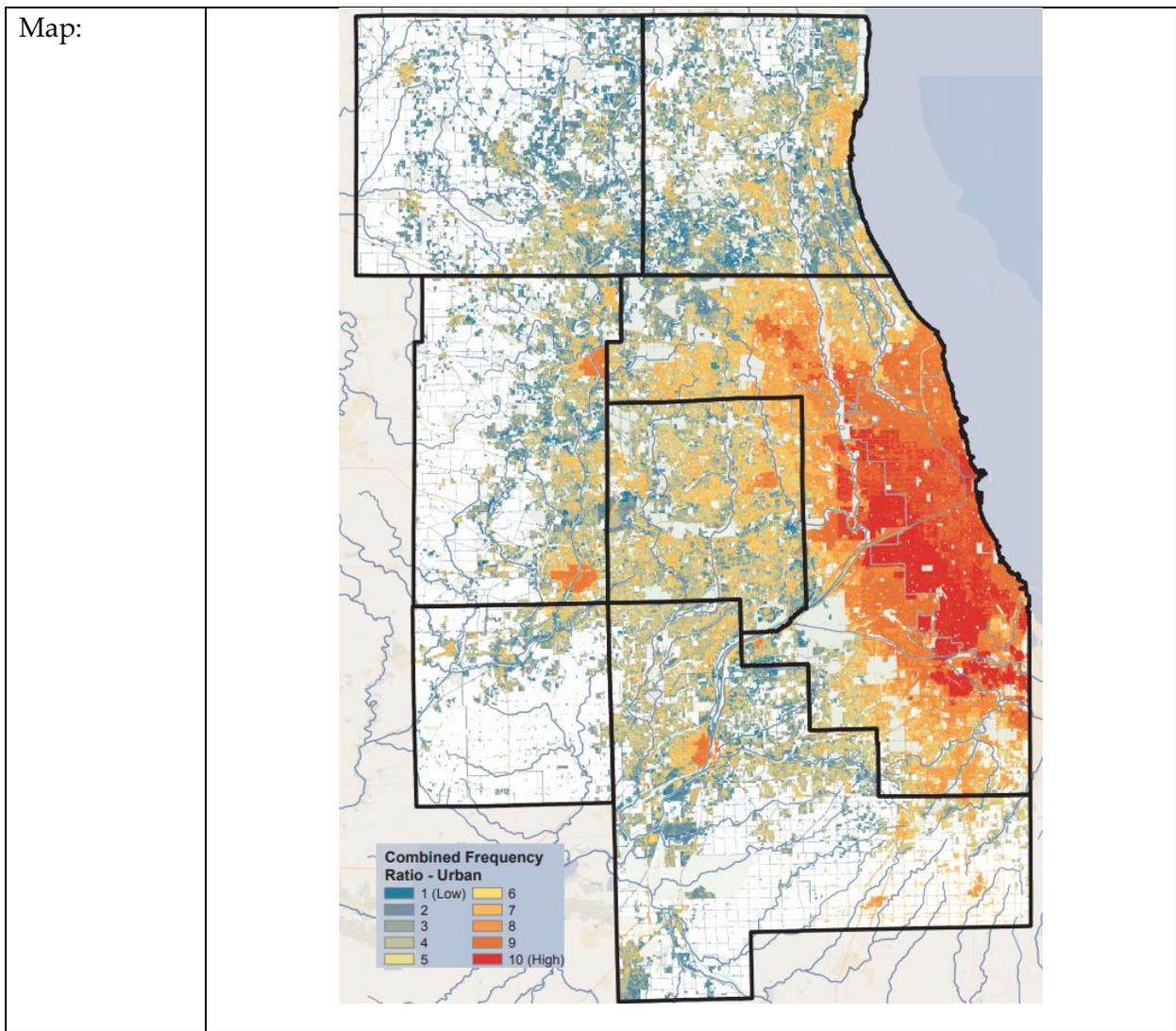## *Regional urban flooding susceptibility index*

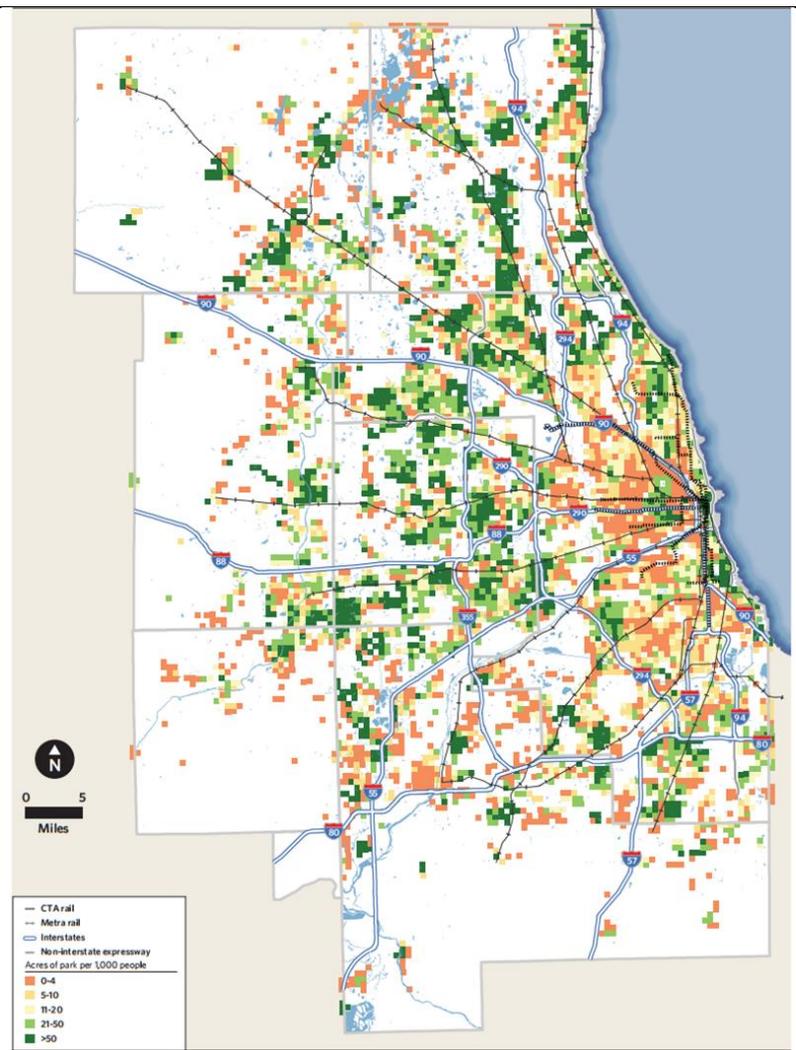| Description:	The stormwater and flooding strategy paper presents strategies to reduce the negative impact of flooding by integrating stormwater management into transportation and land use planning. These improvements can reduce the cost of damages to private property and infrastructure, and keep residents and businesses moving. To help direct these strategies, CMAP developed urban and riverine flooding susceptibility indexes (FSI) to identify priority areas across the region for flooding mitigation activities. The FSI rasters are provided in the zipped geodatabases below. Refer to the strategy paper appendix (also linked below) for information about FSI inputs, procedures, and results. **Related recommendation(s):** Reduce flood risk to protect people and assets
Methodology:	CMAP used the frequency ratio approach to create flooding susceptibility indexes for the region. The frequency ratio approach is a statistical method based on the observed relationship between the distribution of reported flood locations and flooding-related factors. Given the different causes and contributing factors for riverine and urban flooding, CMAP created two separate flooding susceptibility indexes – urban and riverine. Please refer to FloodSusceptibilityIndexAppendix.pdf for more details on methodology.

Map:	

Map caption / legend:

Combined Frequency Ratio - Urban
- 1 (Low)
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 (High)

Access to Parks

| Description: | This LSM measures per capita access to parks based on geographic proximity to recreational open space. Values are reported as the percentage of the regional population with access to at least four acres of parkland per 1,000 residents and at least ten acres per 1,000 residents. Generally, the four-acre standard is appropriate for denser communities, while the ten-acre standard is intended for less-dense areas.

Related recommendation(s): Incorporate natural resources through the redevelopment process |
| --- | --- |
| Methodology: | The data for this LSM is from the CMAP land use inventory (2013) and the U.S. Census (2010). Park access is tracked at the subzone level. A subzone's |

	population is considered to have access to any park acreage within a half-mile radius of the subzone's centroid, and additionally to any park acreage in "community parks" (larger than 35 acres) within a one-mile radius. A subzone's population only has access to park acres that fall within these radii (i.e., if a portion of a large park falls within the radius, only the acres of that portion are counted). Each acre of parkland is then divided by the total population with access to it (from all nearby subzones), and then each of those subzones is allocated a share of that acreage by multiplying its population by that park's acres-per-person value. The population of each subzone with 4+ or 10+ cumulative acres of parkland per 1,000 residents are then aggregated to determine the region's total access to parks.
Map:	

Watershed integrity / water quality

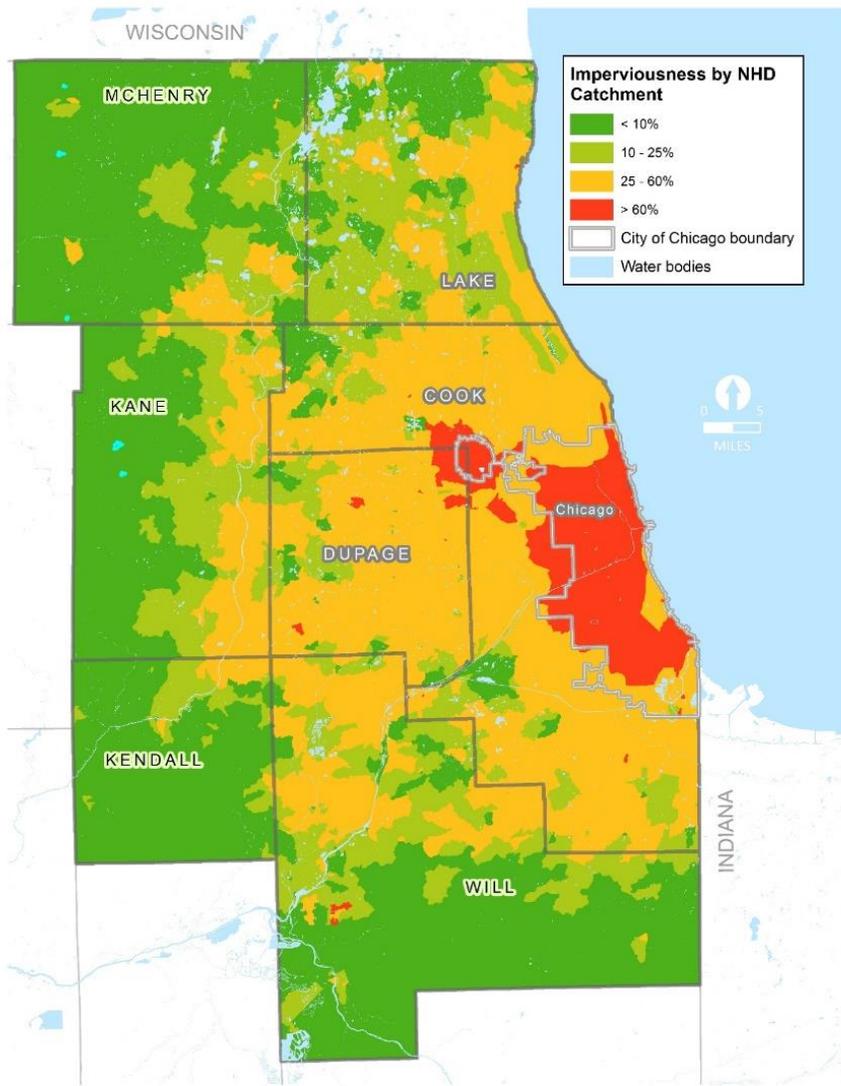|	
Description:	Many of the region's water resources do not meet all goals of the Clean Water Act, designated uses, Water Quality Standards, or measures of biological quality. In addition to CSOs, nonpoint source pollution, including urban stormwater and agricultural runoff, is the major source of water quality impairment today. Helping to reduce the flow of nonpoint source pollution into our waterways is an area where CMAP can provide guidance and influence. This LSM maps out the impervious cover in the region to better understand water quality challenges. **Related recommendation(s):** Protect and enhance the integrity of aquatic systems
Methodology:	The source for this data is the National Land Cover Dataset (NLCD), a raster dataset with 16 land cover classifications that is published approximately every five years by the U.S. Geological Survey (USGS), as well as the National Hydrography Dataset Plus v2, which outlines the boundaries of small watershed catchments.[2] The percent imperviousness of each watershed catchment would first be calculated and categorized into four groupings based on the impervious cover model: - Sensitive: 0 – 10% - Impacted: 11 – 25% - Non-supporting: 26-60% - Urban drainage: 61-100% At the watershed scale, impervious cover can lead to water pollution, erosion, and degraded stream health. Research has shown that subwatersheds with less than 10 percent impervious cover tend to maintain the health of streams.[3] Further increases of impervious cover can lead to impacted streams that could be restored with intervention. In locations with low imperviousness, the strategies would focus on land preservation, compact and conservation design development, and green infrastructure. However, once impervious surfaces cover the majority of the watershed, recovering pre-development stream conditions can be difficult or impossible.

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[2] Original impervious cover model was for small subwatersheds of 5 to 50 km², which is roughly 12,500 acres. NHD+ catchments have an average size 960 acres while HUC 12 watersheds have an average size of 18,900 acres.

[3] Thomas R. Schueler, Lisa Fraley-McNeal, Karen Cappiella, "Is Impervious Cover Still Important? Review of Recent Research," Journal of Hydrologic Engineering 14, no. 4, 2009.

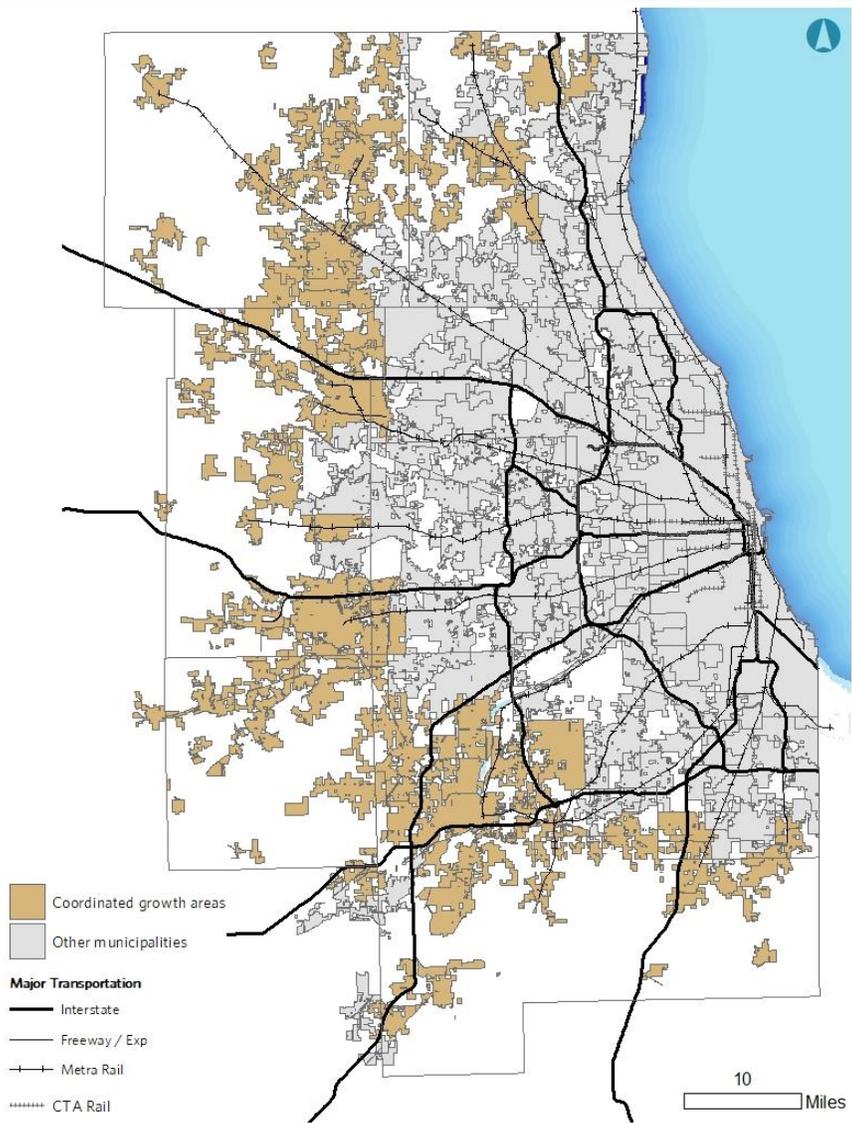|	At that point, the policy recommendation emphasizes green infrastructure retrofits and waterway restoration that improves habitat.
Map:	Source: CMAP analysis of National Hydrography Dataset.

Coordinated Growth Areas

Description:	ON TO 2050 includes policy recommendations for communities at the edge of the region's developed area. As a spatial companion to this set of recommendations, CMAP identified communities with a significant amount of agricultural or natural lands within or adjacent to their boundaries that are likely to experience development pressure within the planning horizon. Overlaying this LSM with the conservation areas LSM illustrates where significant preservation opportunities might be jeopardized by future development and where conservation design or other sensitive development techniques could be employed when development does occur in these locations. **Related recommendation(s):** Integrate land preservation into strategic growth efforts
Methodology:	Using the National Land Cover Database land cover categories[4] and the current protected lands layer used in the ON TO 2050 Lands in Transition strategy paper, CMAP identified municipalities with one or both of the following conditions: • communities with unprotected agricultural or natural lands on non-residential[5] land within their existing municipal boundary above a 25 percent threshold, and/or • communities with unincorporated, unprotected agricultural or natural lands on non-residential land outside of their existing municipal boundary above a 25 percent threshold but within their 1.5 mile planning boundary.

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[4] CMAP defined agricultural land cover based on the cultivated crops and pasture/hay land cover types within NLCD. Similarly, CMAP defined natural land cover based on the deciduous forest, emergent herbaceous wetlands, evergreen forest, grassland/herbaceous, mixed forest, shrub/scrub, and woody wetlands land cover types within NLCD.

[5] Excludes Land Use categories: Residential, Residential Open Space, and Mixed Commercial/Residential.

Map:

Coordinated growth areas

Other municipalities

Major Transportation

Interstate

Freeway / Exp

Metra Rail

CTA Rail

10 Miles

Mobility Local strategy maps

Freight: truck bottlenecks

Description:	By almost any measure, the Chicago region is the nation's premier freight hub. This LSM compiles CMAP's analysis of the highest priority infrastructure projects to maintain that competitive advantage. Truck bottlenecks are defined as locations where trucks experience at least six hours of congestion per weekday, where congestion is defined as truck travel times more than 10 percent greater than free flow truck travel times. Transportation agencies can use this LSM to prioritize investments for the greatest regional benefit. **Related recommendation(s):** Maintain the region's status as North America's freight hub
Methodology:	Truck bottlenecks are calculated by tabulating the number of 5-minute increments when average truck speeds provided in the National Performance Measure Research Dataset for weekdays in 2015 are at least 10 percent below the truck free-flow speeds. The data is reported in hours per weekday. Calculating truck free-flow speed: Truck free-flow speeds are estimated for each highway segment by selecting the greatest of the average speeds calculated for each of the CMAP travel modeling assignment time periods. These time periods are late evening-early morning (8p - 6a); first AM peak shoulder (6a - 7a); AM peak (7a - 9a); second AM peak shoulder (9a - 10a); midday (10a - 2p); first PM peak shoulder (2p - 4p); PM peak (4p - 6p); and second PM peak shoulder (6p - 8p).The data is calculated on and provided in the format of the 2015 Q4 Here TMC shapefile provided with the National Performance Measurement Research Dataset.

| Map: |
Light Congested Hours Trucks 2015 |
|---|---|
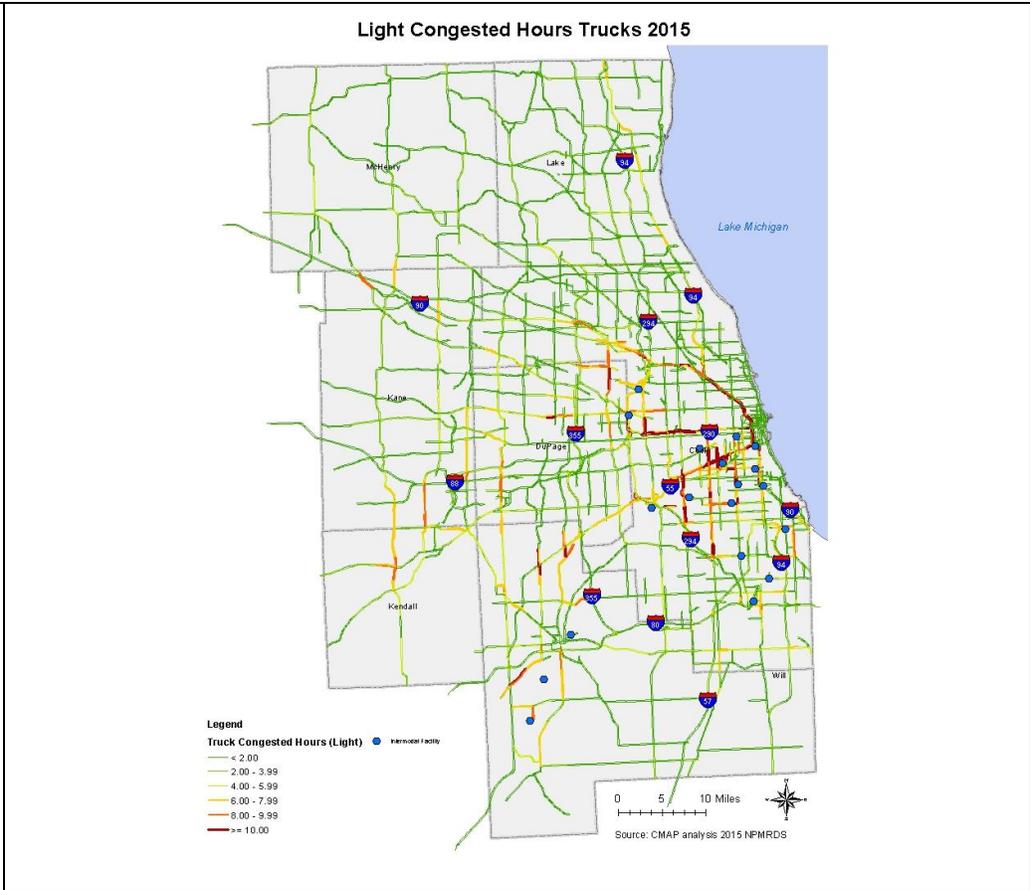
Freight land-use clusters

| Description: | Freight is a critical component of the regional economy in northeastern Illinois and generates significant transportation demand across multiple modes. Our freight network is complemented by economic strengths in manufacturing, warehousing, and distribution. Local governments guide decision-making on the development that supports these industries, as well as on supportive road and utility infrastructure. Freight and industrial development can raise local concerns, such as noise, congestion, air quality, and heavy wear and tear on roads. But, local decisions about freight supportive development can also affect the region's freight network and its economic strength.

This LSM identifies the most significant clusters of freight-supportive land uses in metropolitan Chicago and presents key descriptive statistics regarding the land use and transportation context of those clusters. It highlights the multijurisdictional nature of freight supportive development, identifying groups of municipalities and counties that can plan together for |
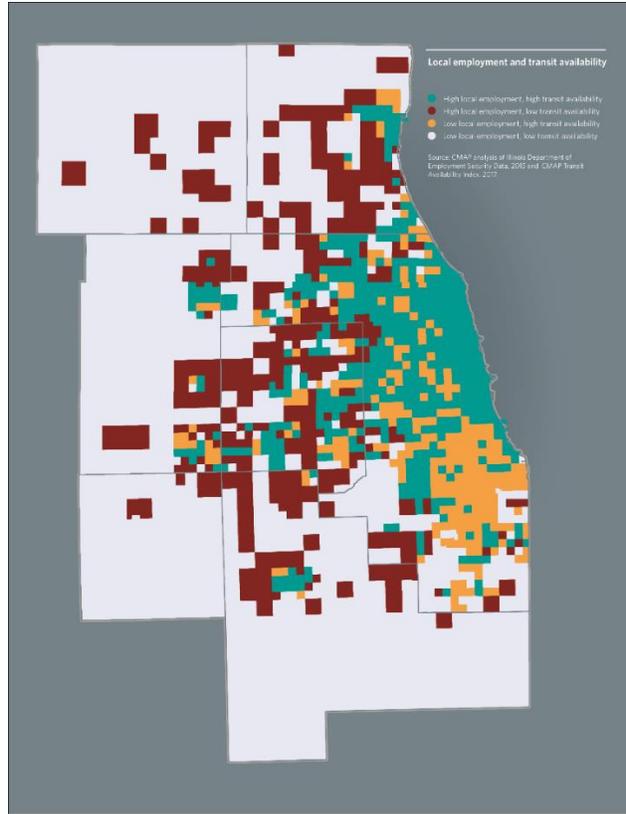|---|---|

Chicago Metropolitan
Agency for Planning

	freight supportive land use, truck routing, quality of life near freight assets, and other freight transportation issues. **Related recommendation(s):** Maintain the region's status as North America's freight hub
Methodology:	This cluster analysis assesses both the percentage of land designated for industrial use and the amount of rentable building area (RBA) classified as warehouse, manufacturing and food processing, or distribution in by CoStar, a provider of real estate data. These three subcategories of industrial facilities were judged to have the largest impact on freight movement; other industrial subcategories such as flex space were not included. The resulting individual clusters were classified based on geography, statistical profile, and a qualitative assessment of shared concerns
Map:	

Transit Opportunities

Description:	CMAP research shows that locating employment near transit can have a bigger impact on transit ridership than virtually any other strategy. This metric compares the availability of jobs to the availability of transit service and was included in the transit trends snapshot. **Related recommendation(s):** Harness the transportation network to promote inclusive growth, Build Regionally Significant Projects, Make transit more competitive
Methodology:	CMAP developed this LSM by combining two data sources. First, CMAP's 2017 transit availability index[6], which is built on four factors: the pedestrian environment, transit service frequency, activities on routes, and proximity to transit. These four factors are rolled up into an index of 1 to 5 at the subzone level, which was then averaged at the zone level. Zones with an average transit availability score of 3 or above were categorized as high transit availability, and zones with an average below 3 were categorized as low availability. 2015 Illinois Department of Employment Security data was used to calculate the number of jobs within one mile of each CMAP zone centroid. Zones with 2,198 or more jobs within a mile (the regional median) were categorized as high local employment, while those with fewer than 2,198 jobs were categorized as low local employment.

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[6] https://datahub.cmap.illinois.gov/dataset/access-to-transit-index

Map:	

Highway Needs

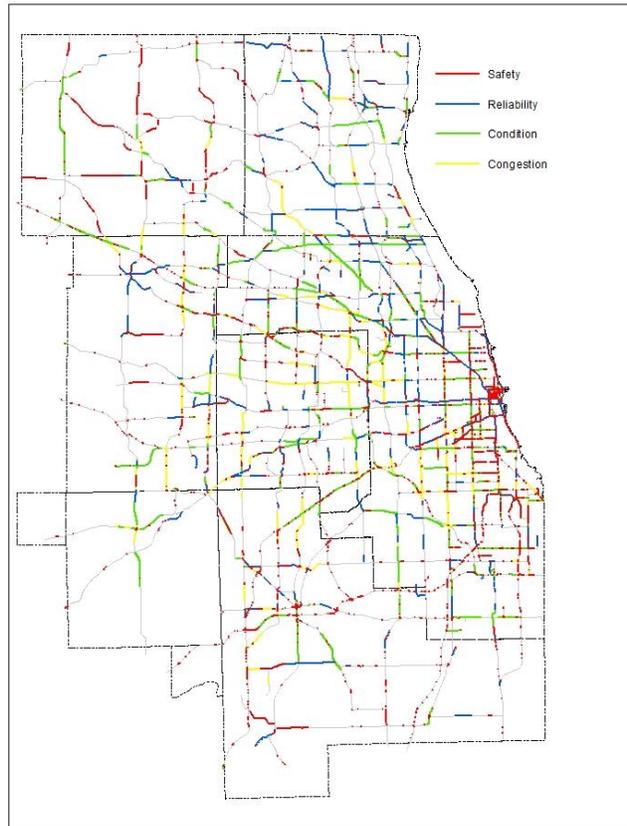| Description:	Evaluating existing needs of the system was part of the RSP evaluation process and a key component of performance based programming. This LSM was used as a component of the regionally significant projects analysis and can be used going forward in other project evaluation. **Related recommendation(s):** Build Regionally Significant Projects, Harness technology to improve travel and anticipate future impacts, Enhance the region's approach to transportation programming, Improve travel safety
Methodology:	The top-scoring 20 percent of expressway and arterial segments are identified as having a high need in the following categories: Pavement condition --For arterials, a combination of Condition Rating System (CRS) and International Roughness Index (IRI) is used, scaled 1-100 from best-to-worst condition for the NHS system. For expressways,

pavement condition is additionally evaluated by median pavement age of the project segments.

Safety -- The severity of safety problems addressed by a project is measured by the rate of serious injury and fatal crashes occurring per VMT on the project segments, scaled 1-100.

Mobility -- Mobility is measured as a combination of the intensity of congestion (measured with the Travel Time Index, or TTI) and the duration of congestion (measured as hours of congestion throughout the day). The measures are weighted equally and rescaled 1-100.

Reliability -- This measure rates the severity of existing travel time unreliability using the planning time index (PTI), scaled to a value 1-100.
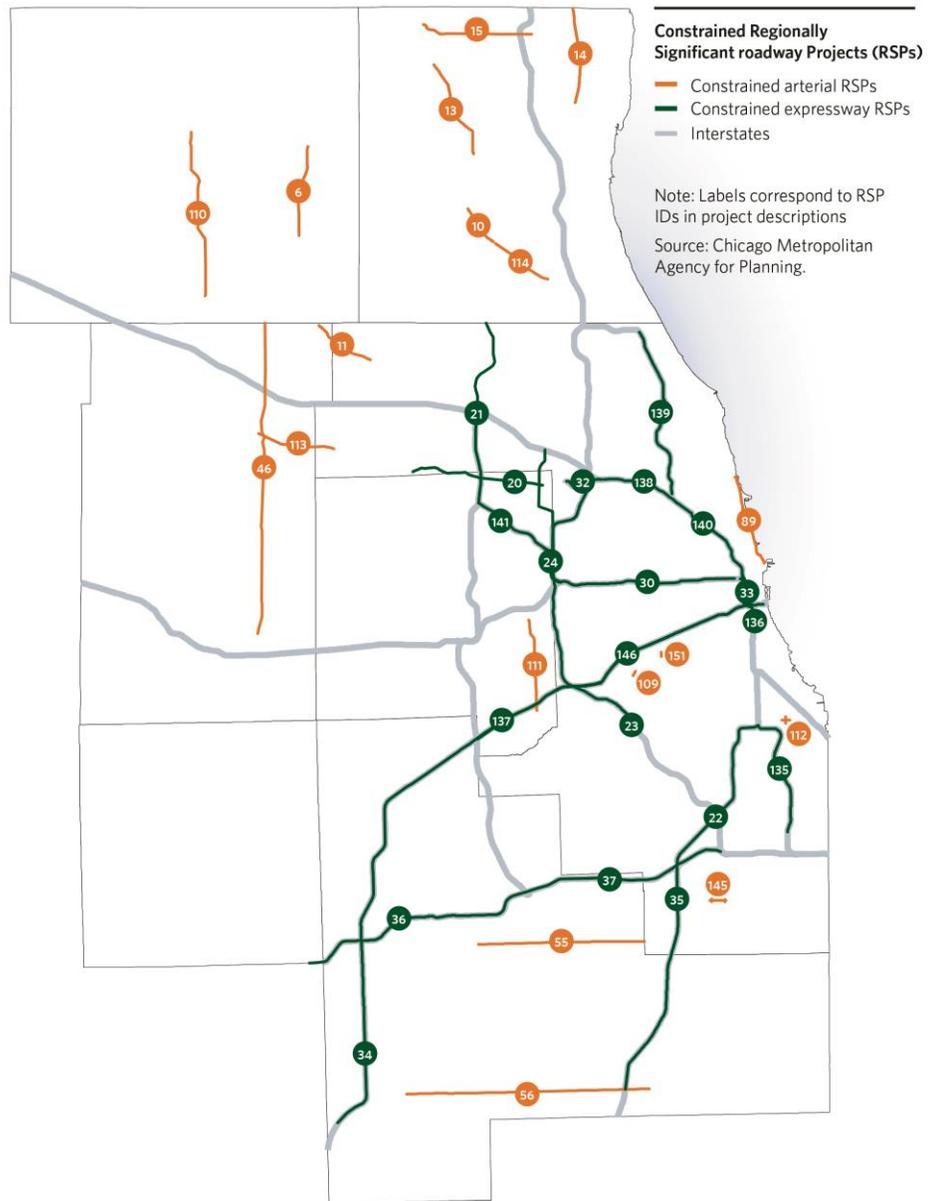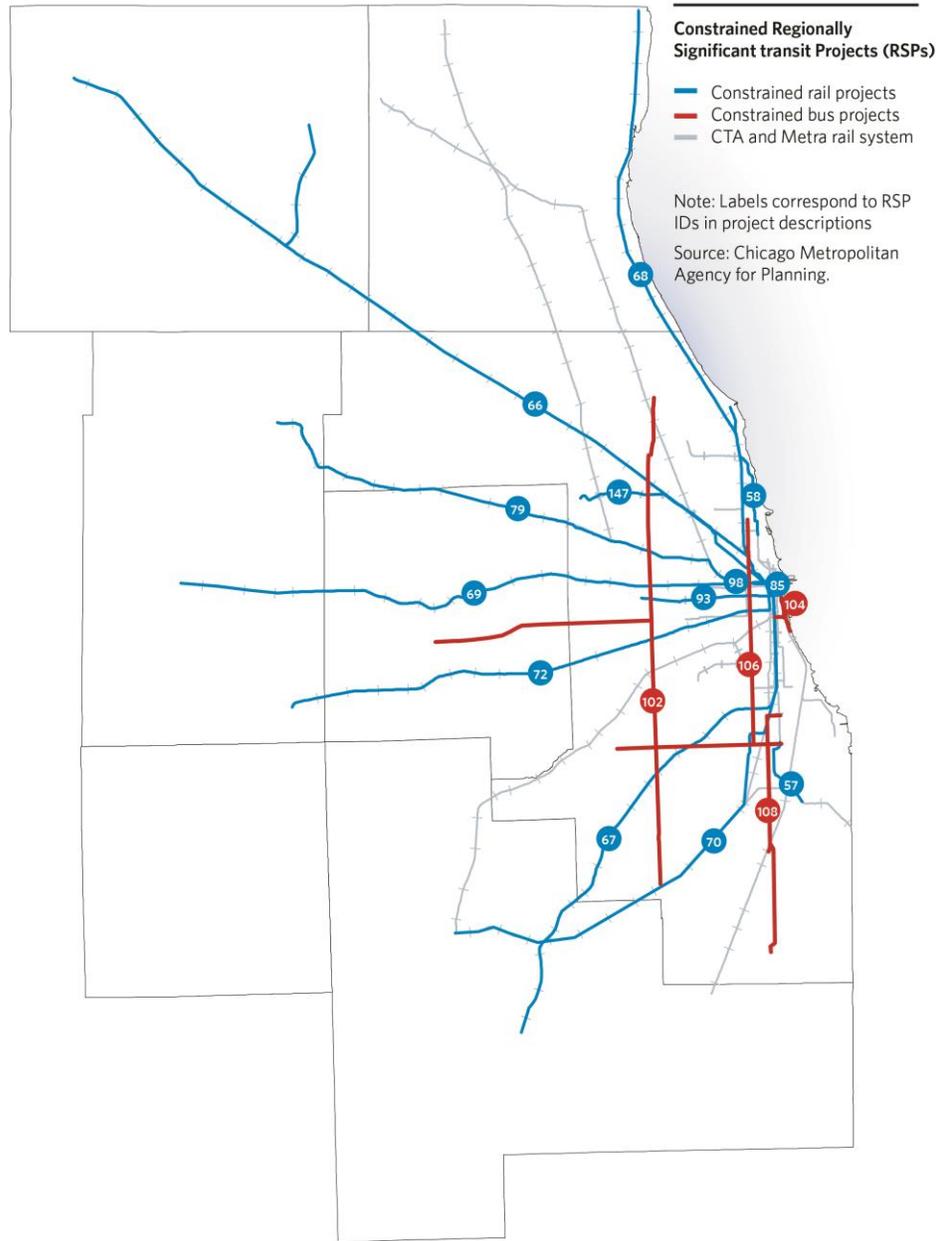
Map:

Regionally significant projects

Description:	Regionally Significant Projects (RSPs) are capital investments in the region's expressways, transit system, and arterials with impacts and benefits that are large enough to warrant additional discussion through the regional planning process. Selected RSPs help the region make progress on addressing today's needs, improving future travel, and implementing the policy recommendations of the plan. **Related recommendation(s):** Build Regionally Significant Projects

Methodology:	To identify constrained RSPs, CMAP solicited candidate projects from partner agencies as well as from the public, then undertook an extensive evaluation of the benefits of the projects, which is documented in the Project Benefits Report appendix. Candidate projects meet one of the following thresholds:
	   1. Costs at least $100 million and either (a) changes capacity on the National Highway System or is a new expressway or principal arterial, or (b) changes capacity on transit services with some separate rights-of-way or shared right-of-way where transit has priority over other traffic
	   2. Costs at least $250 million and improves the state of good repair for a particular highway or transit facility
	
	Evaluation of each project focused on the current need, the modeled benefit with 2050 population and employment, and the degree to which the project fits with ON TO 2050 planning priorities.

Map:

Constrained Regionally Significant roadway Projects (RSPs)

— Constrained arterial RSPs
— Constrained expressway RSPs
— Interstates

Note: Labels correspond to RSP IDs in project descriptions

Source: Chicago Metropolitan Agency for Planning.

Map:

**Constrained Regionally
Significant transit Projects (RSPs)**

━━━ Constrained rail projects
━━━ Constrained bus projects
━━━ CTA and Metra rail system

Note: Labels correspond to RSP
IDs in project descriptions

Source: Chicago Metropolitan
Agency for Planning.

The Chicago Metropolitan Agency for Planning (CMAP) is our region's comprehensive planning organization. The agency and its partners developed and are now implementing ON TO 2050, a new long-range plan to help the seven counties and 284 communities of northeastern Illinois implement strategies that address transportation, housing, economic development, open space, the environment, and other quality-of-life issues. See www.cmap.illinois.gov for more information.

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