

ON TO 2050 Preview

DRAFT report – June 2, 2017

Please provide comments by June 16, 2017

CMAP staff is distributing this working draft of the ON TO 2050 Preview report to CMAP committee, MPO, and Board members for initial review. Please do not distribute.

This draft document will be available for public comment from June 19th – August 3rd, 2017. More detailed comments may be offered during that time period.

Introduction

While the Chicago region has many advantages, it also challenged by complex factors that require careful analysis and decisive action. These include our lackluster recovery from the recession, increasingly insufficient funding for infrastructure improvements, worsening flooding from development patterns and climate change, and a structural mismatch between costs and revenues at the state and local government levels. Such challenges limit the region's resources and threaten its long term prosperity. We need strategies for overcoming these obstacles, capitalizing on the region's numerous assets, and achieving our regional vision: an enviable quality of life and economic vitality for all residents.

ON TO 2050, the region's next comprehensive regional plan, will recommend a suite of actions to move the region toward achieving sustainable prosperity. The purpose of this report is to provide a preview of ON TO 2050's major recommendations in advance of the draft plan's release for public comment in summer 2018. ON TO 2050 will include three overarching principles, which support the regional vision and have relevance across the strategic actions that CMAP will recommend. The principles also form the organizational structure for this report:

Resilience: A strong region requires communities, infrastructure, and systems that are able to thrive in the face of uncertain future economic, fiscal, and environmental shifts.

Inclusive growth: Long-term regional economic prosperity requires increased economic opportunity and improved quality of life for all residents.

Prioritized investment: Achieving regional goals in an era of limited resources requires coordinated prioritization of investments across sectors, including infrastructure, land use, and our economy.

Each of these principles supports the others. *Resilience* will depend upon robust investments and planning that make sense now and also in a variety of plausible future scenarios.

Achieving Resilience will require *Inclusive Growth* to provide opportunity and strong quality of life for all of the region's residents, enabling their full participation in the economy and civic life. Inclusive Growth will necessitate *Prioritized Investment* that facilitates more economic participation to yield higher returns in the long run and ensure that resources are put toward their highest and best use to achieve local and regional goals. These principles will be addressed through ON TO 2050 recommendations across CMAP's core areas of regional economy, land use, natural systems, governance, and mobility.

The preliminary recommendations in this report build upon the policies set forth in GO TO 2040 and synthesize the initial policy development, analysis, and engagement completed for ON TO 2050. Each recommendation complements CMAP's core roles as a land use and transportation planning agency. This report also expands on the [Emerging Priorities Report](#), adopted by the CMAP Board in October 2016, which identified 11 priority areas for further exploration in the ON TO 2050 planning process. An extensive public engagement process,

which reached more than 7,000 individuals, informed the priority areas included in the Emerging Priorities Report.

Since adoption of the Emerging Priorities Report, CMAP has continued to analyze existing conditions and [trends](#), worked with stakeholders to research and develop [strategies](#), made substantial progress toward identifying regionally significant projects and developing the Financial Plan for Transportation, and completed the regional socioeconomic forecast of population, households, and jobs. While a limited number of new recommendations may emerge from ongoing strategy development taking place through summer 2017, the ON TO 2050 Preview Report sets forth major direction for drafting the plan in the coming year, prior to the plan's ultimate adoption in October 2018.

Context

Over the last decade, the region has experienced significant economic, demographic, technological, environmental, and fiscal changes, and the future promises even more substantive shifts. Recent federal and state fiscal trends and entrenched inequality pose a particular challenge to the region's economic vitality. To succeed, we must face today's challenges, build on the region's many resources, and prepare for potential change.

By 2050, CMAP forecasts that the region will add 2.3 million new residents and 920,000 new jobs. But recent trends have tilted toward stagnation and even small declines in population, with increased outmigration to other regions and a lack of new residents from the rest of the nation and world. Employment has grown, but at a slower rate than our peers. At the same time, the region's transportation providers and local jurisdictions are working within an increasingly constrained fiscal environment. Initial forecasts for the ON TO 2050 Financial Plan for Transportation indicate that the region will have insufficient revenues to operate and maintain the system unless new revenues are raised at the local, state, and federal levels. This dynamic leaves no revenue for achieving a state of good repair, modernization, or expansion.

Recent development patterns have exacerbated funding constraints. While the region's population grew 4.6 percent from 2000-15 and total jobs remained essentially flat, our developed area expanded by nearly 12 percent. This has affected how we travel; residents traveling by car can reach two percent fewer destinations (like shopping, doctor's offices, etc.) within 15 minutes than in 2000, and transit commuters can reach 13 percent fewer destinations within a 30-minute trip. Expansion of the region's developed area also brings new infrastructure and service costs, yet we struggle to maintain our existing stock of infrastructure.

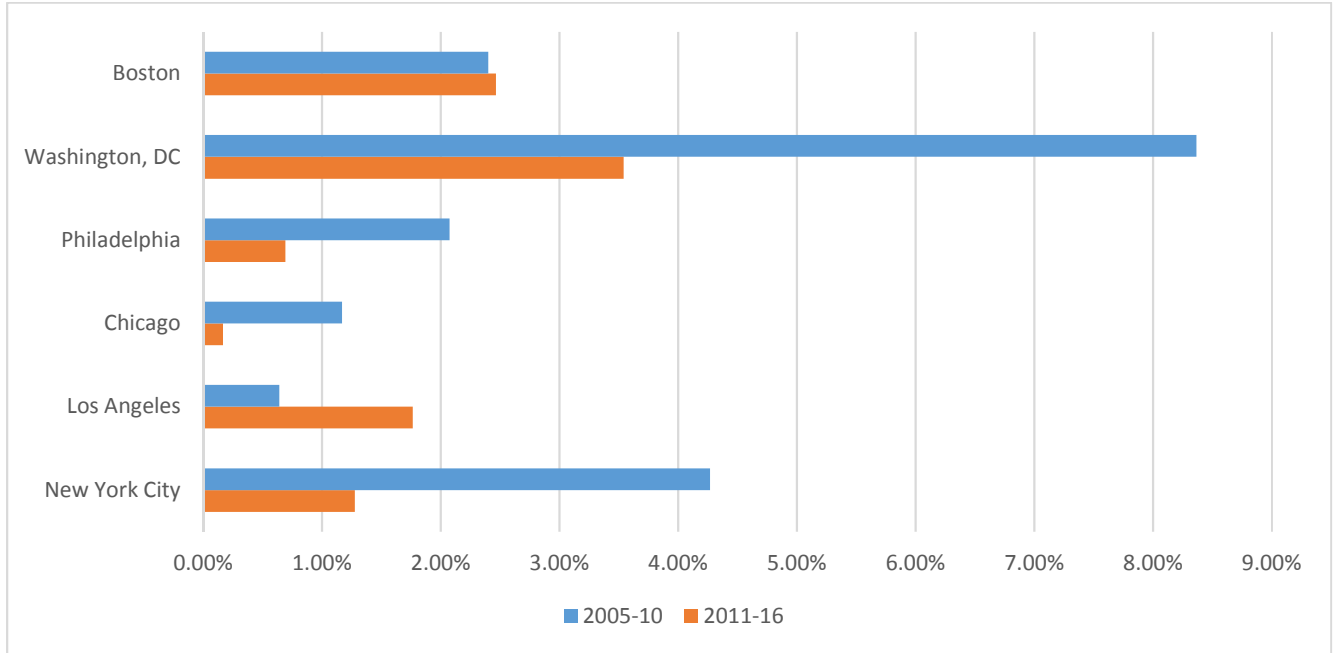
Nevertheless, the region has successes to build upon. Employers in the region have access to a diverse and well educated workforce. The region's unemployment rate continues to improve, and our labor force and gross regional product continue to grow. Our region's economy is also diverse and specialized across numerous service-based and goods-producing industries. Pending technological advances offer opportunities to continue to attract and train talent and grow new industries in the future. From 2001-15, an estimated 61,500 acres of conservation open space were permanently protected, representing 22 percent of the total protected areas of the region.¹

The region also has proven its ability to collaborate to address complex problems. Our stakeholders have created new workforce training initiatives to connect workers to growing industries, prioritized transportation modernization and reconstruction projects to speed commutes and address our worst bottlenecks, and built stormwater solutions across jurisdictions to reduce persistent flooding. We are beginning to reduce interjurisdictional competition, and focus on promoting the region's assets. To succeed in a changing future, the

¹ CMAP defines conservation open space using the CMAP Land Use Inventory. Conservation open space could have a variety of land cover types and likely does not include lands protected specifically for agricultural production.

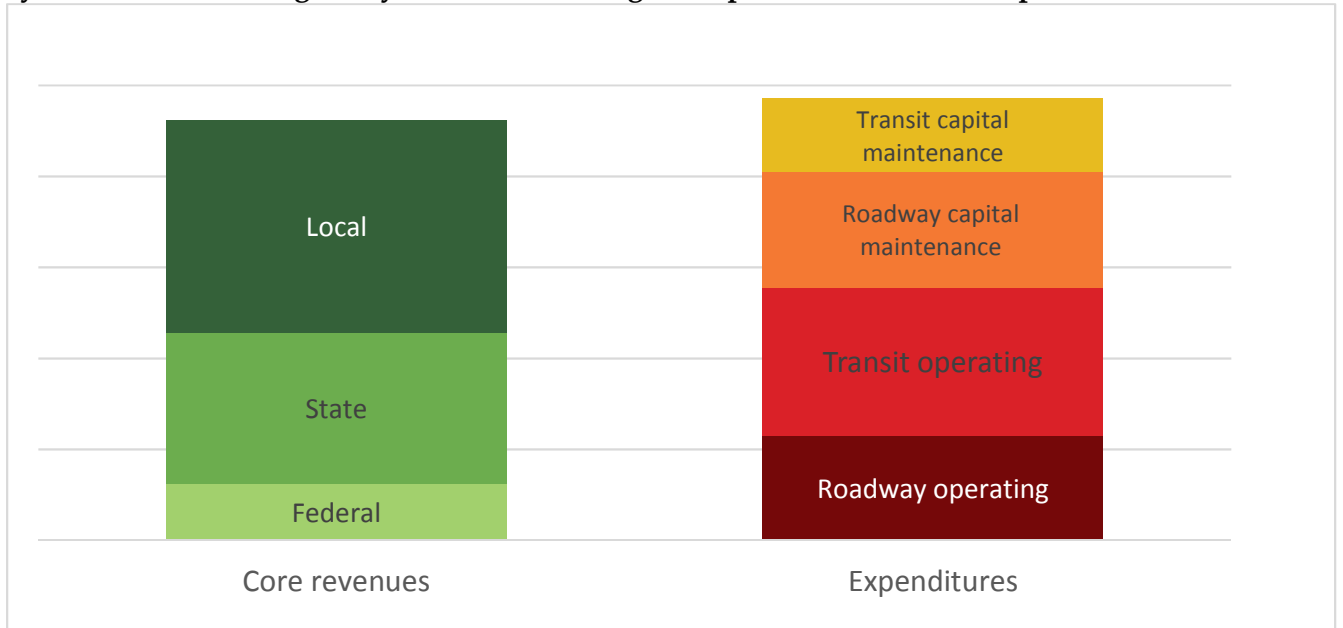
region will need to coalesce around initiatives that promote strong communities, a good quality of life, and economic opportunity and success.

Population growth rates in the Chicago region lag peer regions, 2005-16



Source: Chicago Metropolitan Agency for Planning analysis of U.S. Census Population Estimates Program data, 2005-16

ON TO 2050 core revenues will not be sufficient to operate and maintain the transportation system, let alone bring the system to a state of good repair, modernize, or expand



Source: Chicago Metropolitan Agency for Planning analysis

Alternative Futures Engagement

As part of ON TO 2050 engagement, CMAP has created five “Alternative Futures,” each exploring macro-level economic, technology, environmental, and other trends that will shape the region in the decades to come. Each future features a suite of strategies that CMAP and partners can undertake to capitalize on related opportunities or mitigate impacts related to trends. While public engagement on the five futures is still taking place, strategies relevant to each are emphasized across the three major sections of this report. The five futures are:

Changed Climate. By 2050, our climate will differ from today's in significant ways, causing widespread flooding, extreme temperatures, and extended periods of drought. These impacts will strain the region's infrastructure, natural systems, and communities, disproportionately affecting our most vulnerable residents. Shifting habitats and agricultural zones, drought, and water supply and quality issues will also present economic and environmental challenges. There may also be economic growth as residents and industries from areas more severely impacted by climate change move to the Chicago region. These changes will force us to rethink how infrastructure, neighborhoods, and cities are built. Climate resilience strategies are highlighted in the Resilience section.

Walkable Communities. If today's trends continue, more people will want to live in walkable communities by 2050. To meet the demand, reinvestment will occur in many of the region's existing downtowns and commercial cores, and some communities will create new walkable, mixed-use centers. Residents in these areas will increasingly be able to bike, walk, and use transit and on-demand ride sharing services, leading to improved mobility and a decreased need for parking. But, as demand for these areas rises, affordable housing may become more scarce, particularly in communities with many amenities and good transit access. Strategies supportive of fostering walkable communities are in both the Resilience and Prioritized Investment sections.

Innovative Transportation. In 2050, innovative transportation technologies, such as accurate real-time information, smart infrastructure, and automated vehicles, will be widely available and utilized. These technologies will make travel for people and goods faster and more seamless across all modes. Goods movement in particular may benefit from increased use of on-demand services, driverless trucks, and high-tech coordination across modes such as rail, trucking, and shipping. However, new technologies may not be affordable to everyone, resulting in disparities of access. Strategies related to technological advancements in transportation are included in the Prioritized Investment section.

Constrained Resources. By 2050, state and federal resources to fund infrastructure improvements and vital public services are likely to stagnate or diminish. This will increase the financial burden on local governments, which may need to institute new tolls, taxes, and fees to make ends meet. In particular, low capacity communities and disinvested areas may have even more difficulty providing adequate services, infrastructure, and maintenance. Strategies to strengthen municipal capacity are in the

Resilience section, while strategies to increase transportation revenues at all levels are included in the Prioritized Investment section.

Transformed Economy. The economy has already shifted from primarily producing goods to providing services. In the future, artificial intelligence, machine learning, advanced materials, automation, and digitalization will transform the goods and services we produce and how we produce them. Most occupations, at all skill levels, should anticipate widespread changes as technological advancements require workers to have more training to enter and stay in the workforce. Historically marginalized communities will continue to suffer without enhanced educational and job opportunities. Strategies to provide more opportunities for upward mobility with adequate wages are included in the Inclusive Growth section.

Through August 2017, the public is asked to weigh in on the five futures via in-person workshops, interactive kiosks stationed around the region, online MetroQuest surveys, and topical forums. Feedback will be used to refine ON TO 2050 recommendations and identify strategies that are especially important across a range of different futures.



Resilience

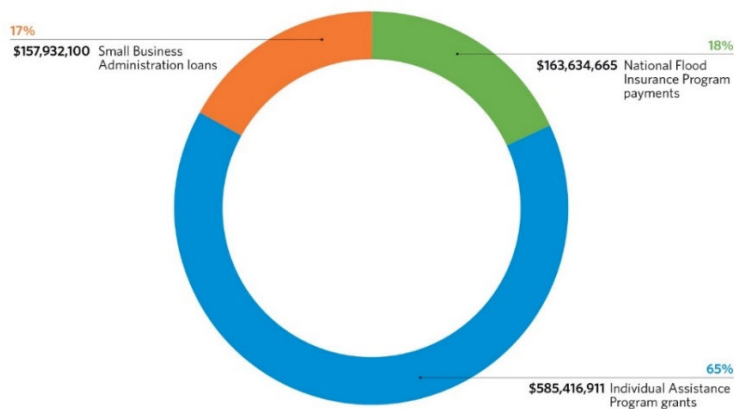
A strong region requires communities, infrastructure, and systems that are able to thrive in the face of uncertain future economic, fiscal, and environmental shifts.

Resilience may be defined as the ability for the region and its communities to prepare for and recover from acute shocks and chronic stresses and transform its infrastructure, natural systems, and social structures to be more responsive. In addition to recovering quickly from unanticipated shocks and stresses, a resilient region should be able to “build back better” by capitalizing on opportunities that might arise from challenges or shocks. For instance, if extreme heat causes roadway buckling, reconstruction can forward many objectives by incorporating design and materials that make the road more resilient to future climatic changes, stormwater infrastructure to help mitigate flooding, and provision of alternative transportation modes to build in greater redundancy. While resilience is sometimes thought of as relating specifically to climate change, ON TO 2050 will use the construct of resilience across topic areas as a way to think proactively and dynamically about future conditions and how the region and its communities might respond in the face of uncertainty.

The Alternative Futures process is an embodiment of the concept of resilience, as each future considers trends likely to affect our region and the steps that could be taken to better prepare for impacts or capitalize on opportunities, with the ultimate goal of building a region that is responsive and flexible. For example, in a future where financial resources from the state and federal governments continue to be constrained and even decline, local governments can adjust revenue policies, such as taxes, fines, and fees, and tighten their belts now to ensure that they can continue to provide a high quality of life. With innovative technologies on the horizon that will revolutionize mobility, transportation agencies, the private sector, and county and local partners can lay the regulatory framework and infrastructure improvements today to enable these technologies to take root.

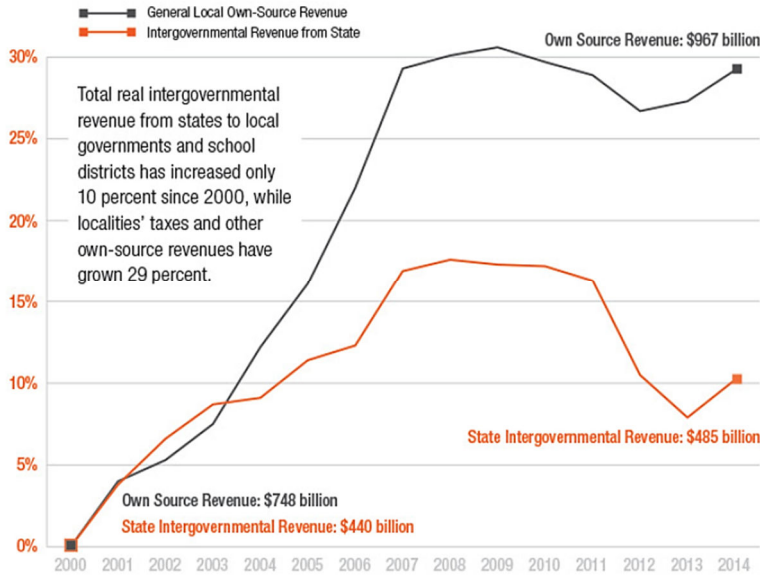
Flooding damage payments from federal programs totaled more than \$900 million in the Chicago region between 2003 and 2015, but covered only a fraction of total damages

Flooding damage payments from federal programs to the Chicago region, 2003 to 2015 Source: 2017 Federal Emergency Management Agency.



Local governments are already adapting to constrained state and federal revenues, and will likely continue to shoulder more of the burden

HOW LOCALITIES' REVENUES HAVE CHANGED SINCE 2000



Increase the capacity of communities to achieve local and regional goals

The importance of municipal governments in providing for a high quality of life cannot be overstated. While municipalities in the region largely wish to move local and regional goals forward, some face substantial barriers, such as a lack of technical knowledge by staff or elected officials, low staffing levels, poor fiscal condition, lack of political will, or constituent opposition to plans and projects. These barriers can limit municipalities' abilities to proactively plan for community needs and force reactivity to shocks and stresses rather than resilience. While CMAP has had success in assisting municipalities through LTA planning efforts, ON TO 2050 will identify more ways to ensure that all municipalities function effectively and efficiently, have adequate staff and financial resources, and are able to define and fulfill long-term local and regional goals. For example, CMAP should refine the LTA program's offerings to include related technical assistance and trainings and could also provide complementary guidance on such subjects, such as economic development, coordinated investment, plan implementation, or consolidation. ON TO 2050 will also propose strategies for municipalities to increase their capacity, such as partnering with adjacent or overlapping jurisdictions to share services or pursue joint purchasing, consolidating units of government or certain services to improve services or gain efficiencies, and implementing planning strategies to improve investment prioritization, such as capital improvement plans or more detailed and transparent budgeting.

Address state and local tax policy

The State of Illinois and many local governments must address significant financial challenges stemming from rising expenditures and outdated, inequitable revenue structures. Reforms will be required to adequately fund infrastructure, services, and pension obligations. However, lack of adequate solutions or action to date threatens the region's economic resilience by deterring households and businesses from making long-term investments. Businesses in particular have to consider the uncertainty about long-term tax liabilities as they plan for large-scale investments and expenditures. The lack of reliability disincentivizes major investments and hinders the region's ability to attract and retain businesses. While many intractable issues at the State level are out of the control of CMAP and partners, ON TO 2050 will recommend that State and local elected officials take action to reform state and local tax policy to ensure adequate revenues, predictability and reliability, and improve equity across households, businesses, and local governments. A future with decreased federal, and potentially state, funding resources requires stable and efficient tax structures that promote business investment and local government resilience.

In particular, state and local tax structures affect the ability of the region's governments to promote regionally beneficial land uses and meet local land use and quality of life goals. Under the current tax structure, communities with land use mixes that emphasize retail may have a stronger fiscal position than other communities in the region. Communities without sales tax-generating businesses have fewer options to raise municipal revenues. Moreover, the retail landscape is changing as consumers purchase more goods online and purchase more services, neither of which is included in the local sales tax base. ON TO 2050 will recommend state tax reforms, such as expanding the sales tax base, to ensure that communities can provide municipal services and infrastructure regardless of their land use mix. CMAP and other partners should also explore fiscal strategies to more fully support all land uses, particularly industrial development. Balancing the fiscal outcomes between various land uses can support regionally beneficial ones, as well as allow communities to pursue land uses that best support their goals.

Support walkable, mixed-use communities

Walkable, mixed-use communities forward a variety of livability goals and also aid in regional resilience. For instance, compact development patterns can provide supportive densities for transit service and also facilitate walking and biking; transit and non-motorized options in turn improve mobility and public health and reduce greenhouse gas emissions. Reinvesting in infill communities also makes efficient use of existing infrastructure and helps to preserve natural resources and agricultural land at the periphery of the region. ON TO 2050 will recommend planning for and reinvesting in mixed-use and transit-served areas in particular, and will also include placemaking strategies to apply in such locations. With increased demand for walkable communities, it will also be necessary to ensure that lower-income groups are not priced out of transit-served areas and other walkable places by preserving and adding affordable housing at the local level.

Incorporate climate change considerations into planning and development

Anticipated climate impacts for our region include more extreme temperatures and more intense and frequent storms and droughts. The sooner that considerations for climate change can be integrated into planning efforts, infrastructure design, and developments, the better prepared our region will be in the long term. ON TO 2050 will emphasize the need for local planning efforts, such as comprehensive plans, capital improvement plans, and regulatory updates to zoning, subdivision, and stormwater and floodplain regulations, to assess climate risks and impacts and provide strategies to help mitigate or prepare for what lies ahead. In particular, planning efforts should seek to minimize impacts to those disproportionately affected by climate change, such as lower-income residents, the elderly, and populations of color.

CMAP should directly promote the inclusion of climate considerations in local planning work through the Local Technical Assistance (LTA) program, and can also provide relevant data and other resources to partners. For example, CMAP can identify high quality natural lands in the region that are prime for conservation (and essential to replenishing groundwater recharge areas and mitigating flooding from climate change), which can then be used by conservation organizations, forest preserve districts, and governments for land acquisition and protection. CMAP can also identify areas of intense flooding in the region, along with a toolbox of context-appropriate flood mitigation solutions to apply in those areas, that can be utilized by municipalities and others in planning and development processes.

Plan for the regional transportation impacts of major land use change

Municipalities are the primary decision-makers for land use and development, and will remain so. However, major standalone developments or cumulative smaller developments can have substantive impacts on the region's transportation network, land use, or service and infrastructure costs. For example, approval of many individual retail developments may lead to expansion of a road, or addition of a major manufacturer may require the state or county to upgrade a road to support related truck traffic. CMAP and stakeholders should evaluate options to better assess the long term impacts of major and cumulative change, and allocate infrastructure costs.

The region should pay particular attention to major freight facility developments, which can have significant impacts on the region's transportation system and land use patterns, generating substantial amounts of truck and rail traffic, affecting multiple jurisdictions, inducing major real estate developments, and often requiring costly new public infrastructure. At the same time, trends in freight technology, land use, and movement continue to change rapidly. Online ordering of goods has led to new types of distribution facilities, and placed more trucks on the road throughout the region. ON TO 2050 could adopt principles to assist municipalities and counties in planning for the impacts of these developments at the local scale. These principles could also frame future CMAP analysis of the broader, regional-scale impacts of major freight and other developments on regionally significant projects, land use patterns, the regional economy, and high-priority natural areas.

Beyond freight, major shifts in transportation and technology are already affecting land use. For example, increasing preference for biking, walking, and transit as well as living within walkable areas may reduce demand for parking and increase transit needs. CMAP and partners should identify best practices for communities to meet today's needs, while also designing for major changes in the region's transportation system and built environment.

Coordinate across jurisdictions to promote collaborative action

In a future with limited public resources, collaborating across jurisdictions to plan, provide services and infrastructure, and promote economic development will become increasingly critical. The region's local jurisdictions can leverage the expertise and capacity of each other to improve services and create efficiency. Many infrastructure issues, such as water resources coordination, can only be effectively addressed across jurisdictions. ON TO 2050 will highlight new opportunities for coordination, and emphasize the benefits to the region's economy and quality of life.

In addition, coordinating on economic development issues can minimize competition and attract businesses to the state and region with less public cost. Recruitment should focus on the region's core infrastructure, human capital, and quality of life strengths. The region's counties have already begun discussing development of a coordinated regional entity to attract and retain new businesses, instead of focusing on competition between counties. This and similar efforts are critical to make the most effective use of the region's limited resources, promote new growth, and capitalize on our assets.

Inclusive Growth

Long-term regional economic prosperity requires increased economic opportunity and improved quality of life for all residents.

Today, high levels of economic inequality are limiting our region's capacity to grow. Inequality unfolds across a number of dimensions, limiting the ability of some residents to succeed due to compounding factors such as the community they live in, their race or ethnicity, and/or their socioeconomic status. Limited opportunity can extend across generations, circumscribing the lifelong earnings and entrepreneurial potential of residents through decreased access to quality education, employment, housing, community, or transportation choices. These residents are not well connected to opportunities provided by the region's economy. 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 compete in the future, the Chicago region must make full use of all its resources, including the full potential of its existing workforce, businesses, and infrastructure. Regions with lower degrees of economic inequality – the gap between the highest and lowest wage earners - experience stronger and more sustained economic growth, so decreasing inequality and increasing connections to the region's economy for under-engaged workers will provide benefits across the economy. Paired with other strategies to promote the competitiveness of our economic assets, inclusive growth strategies can help the region to restart long-term economic growth and increase the prosperity of all its residents.

To assess options to promote inclusive growth, CMAP has identified *economically disconnected areas (EDAs)*, which are concentrations of low-income residents who are also persons of color or have limited English proficiency. As shown on the facing page, outcomes -- whether employment, income, housing status, or commute -- for many residents of these areas differ sharply from the outcomes for residents that call other parts of the region home. ON TO 2050 may also define other vulnerable groups – such as the transit-dependent, elderly, or people with disabilities -- that may warrant special consideration for different planning topics, such as climate change or transit access.

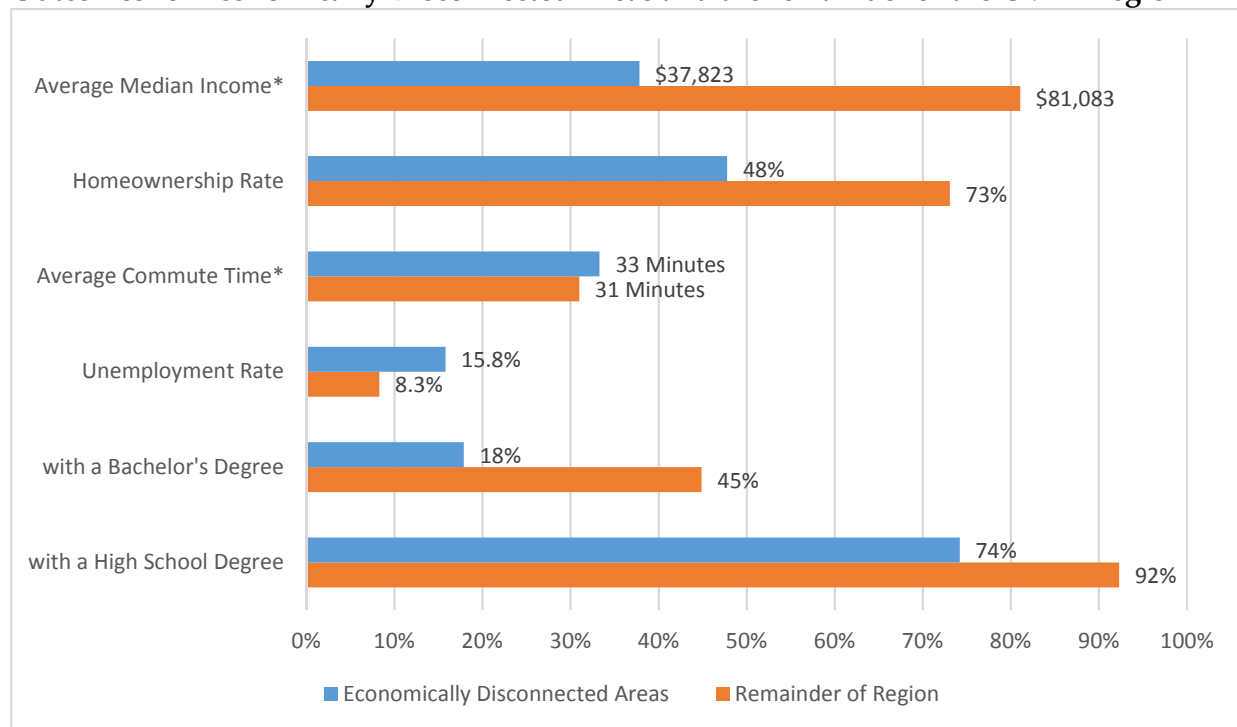
Negative effects associated with EDAs also extend to overlapping communities, which often have lower property values and challenged commercial and residential markets. In turn, these communities struggle to provide a strong quality of life and needed services with limited resources. These compounding issues require a broad set of solutions to help economically disconnected residents and their communities thrive.

Consider disproportionate impacts in planning processes

As mentioned above, in addition to those groups within economically disconnected areas, other populations may experience disproportionate impacts for different issue areas. The Federal Highway Administration requires metropolitan planning organizations, which includes CMAP, to assess the impact of transportation investments on “Environmental Justice” (EJ) populations,

including low-income and minority residents, to ensure that the benefits and burdens of such investments are fairly distributed. This criteria is included in CMAP’s evaluation of regionally significant projects, but there is much room to expand the concept in the agency’s work. ON TO 2050 will specifically consider strategies for disproportionately impacted populations across topic areas, including inclusive growth, housing choice, land use planning, transportation programming, and climate change. In addition, the plan will reinforce the importance of thoughtful and systematic inclusion of disproportionately affected groups in planning processes to ensure that there are legitimate avenues for input and that satisfactory and effective solutions are identified for all. In particular, the LTA program can advance this through continued evolution of thoughtful and creative outreach and engagement techniques.

Outcomes for Economically Disconnected Areas and the remainder of the CMAP region



Source: CMAP analysis of U.S. American Community Survey 5-year data, 2010-14

*Note: Average median income is calculated across census tracts. The 2.3 minute disparity in commute time translates into an additional 18.4 hours, or 2.3 working days, over the course of a year.

Align priorities to target investments and technical assistance to economically disconnected areas

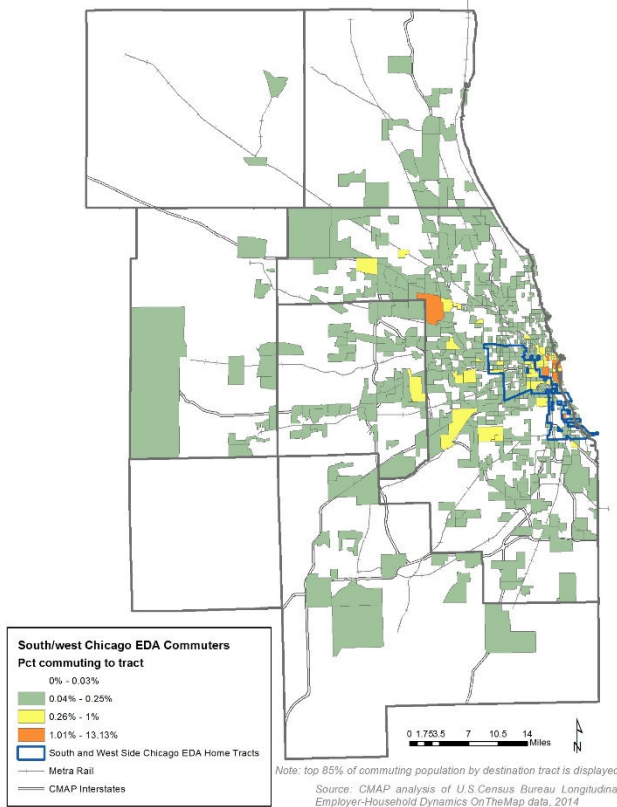
The region has a wealth of actors with the potential to address the range of issues integral to promoting inclusive growth, including transportation, K-12 education, job training, public safety and crime, public health, housing, and other issues affecting economic mobility and quality of life. Many organizations are already taking up this challenge, with substantive inclusive growth efforts underway by civic and government stakeholders. To reduce disparities and promote inclusive growth, CMAP and its partners should align priorities, strategies, and geographic areas to focus investments and assistance. CMAP should direct technical assistance

and research within EDAs, as well as identify and support transportation projects that most benefit these areas. While issues like safety, education, and public health are critically important to the vitality and success of our region, CMAP partners will take the lead in advancing efforts in those areas.

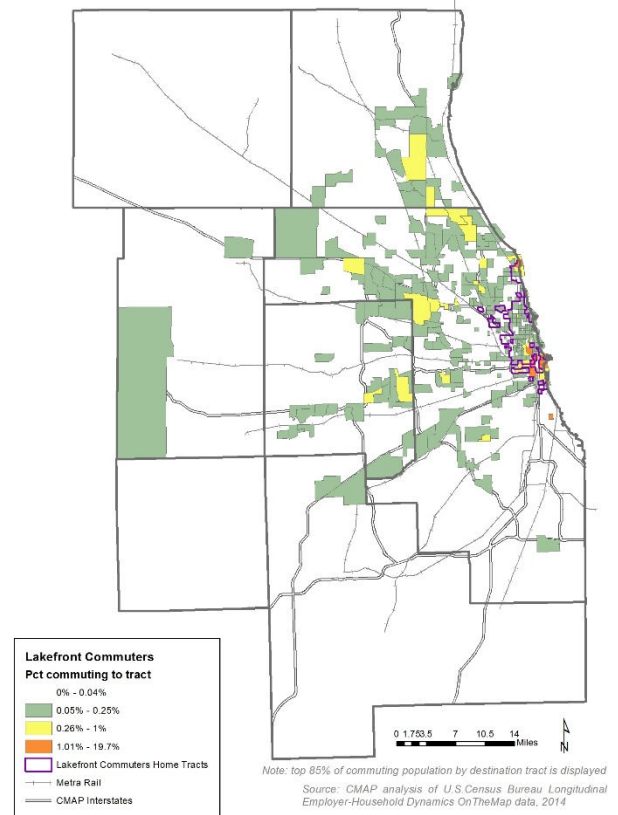
Many EDA residents are dependent on transit or carpooling, rather than owning their own vehicle. EDA residents are 1.7 times more likely to carpool, and 1.4 times more likely to use transit to reach their place of work. At the same time, these workers often commute to dispersed destinations that are not easily reachable through transit. The map below highlights commute destinations for a subset of EDAs compared to a subset of commuters living along Chicago and Evanston’s lakefront. CMAP and Service Board planning for transit modernization should emphasize preserving these employment connections through existing transit or emerging transit service types that may cost-effectively improve connections between EDAs and jobs.

Commute destinations for workers living in selected Chicago Economically Disconnected Areas compared with selected lakefront commuters

South and Westside Economically Disconnected Areas



Selected Lakefront Submarket



Source: CMAP analysis of LEHD OnTheMap data, 2014 Note: Each map shows destinations for 85 percent of workers commuting from the outlined area. South and west commuters are located within a subset of EDAs in the city of Chicago, equaling approximately 175,000 workers. Lakefront commuters are located within a “submarket 3” area in the joint CMAP and the DePaul Institute for Housing Studies analysis of regional housing markets, equaling approximately 273,000 workers. This submarket type is characterized by higher incomes and densities, younger residents, and higher cost housing.

Develop structural solutions to promote reinvestment in disinvested areas

EDAs strongly overlap with disinvested areas - communities that experience a persistent, long-term lack of market investment, leading to declining property values, taxes, employment, and, frequently, population. This disinvestment often constrains the ability of any individual community to respond effectively, and high tax rates and low market potential limit private investment. Solutions for disinvested areas will differ substantially from typical, market-based planning and investment practices. These communities have strong assets in their residents, existing infrastructure, and businesses, but these are often insufficient to address the systemic issues communities with significant disinvestment face. Among other solutions, CMAP and partners should build on existing community assets, identify unique regulatory and tax solutions to persistent vacancy and abandonment, build municipal and private sector capacity, and help communities establish strong partnerships with lending institutions. CMAP should also explore new federal, state, and local solutions to address systemic barriers to investment in these areas, as well as promoting local best practices.

Promote housing choice

Housing choice is the ability for all households in the region to find a quality affordable home that fits each household's preferences, including proximity to jobs, transportation, and other amenities, throughout all stages of life. Currently, the region's housing supply does not meet demand for all housing choices, particularly residents seeking housing in higher opportunity areas (i.e. communities with good access to jobs, good schools, and transit). The barriers to housing choice are broad and require a coalition of CMAP and stakeholders to increase local capacity to address affordability or vacancy issues, revise building and zoning ordinances, educate residents on the benefits of choice, and identify changes to federal regulations.

Provide paths to jobs with meaningful economic opportunity

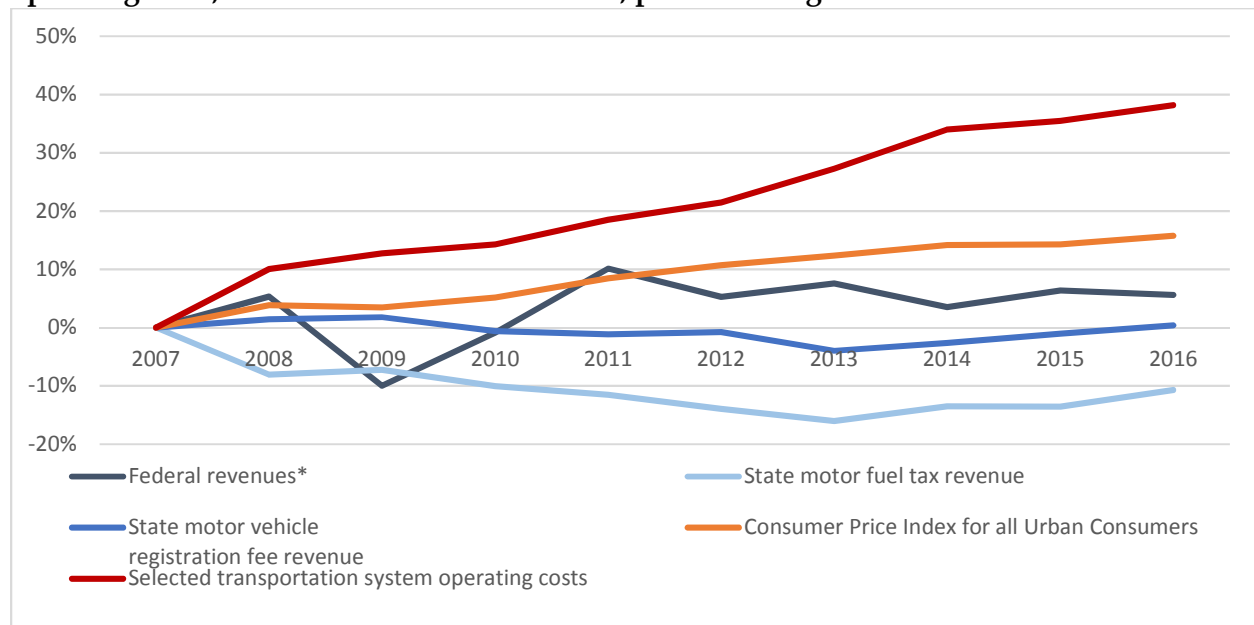
Not all employment is equal; workforce training efforts for lower-skilled residents, such as workers living in EDAs, should focus on growing industries as well as jobs that offer potential for increased earnings and skills over the long term. The region's Workforce Investment Boards already provide a national example of successful coordination with each other and the private sector. CMAP, civic groups, and other stakeholders should identify growing industries with potential for upward mobility to offer a refined focus for these job training efforts. Similarly, municipalities, counties, and the state should reorient economic development efforts on clusters that drive regional economic growth creating more and higher paying jobs, jobs with the potential for inclusive growth.

Prioritized Investment

Achieving regional goals in an era of limited resources requires prioritization of investments across sectors, including infrastructure, land use, and our economy.

Limited public resources require the public sector to carefully prioritize investments in infrastructure, services, new development, technical and funding assistance, and other areas. Transportation funding from the federal and state government has been stagnant or diminishing while costs have continued to rise, and this trend shows little sign of reversing.

Federal and state transportation revenue to northeastern Illinois compared to inflation and operating costs, estimates for selected sources, percent change since 2007



Source: Chicago Metropolitan Agency for Planning analysis of Illinois Department of Transportation data, Illinois Office of the Comptroller data, Regional Transportation Authority data, and data derived from state/regional resources tables. Note: 2009 federal transportation revenue excludes revenue from the American Recovery and Reinvestment Act. Transportation operating costs include those incurred by Illinois Department of Transportation's District One, Illinois Tollway, Regional Transportation Authority, and all transit service boards.

ON TO 2050 will identify this as one of the key challenges facing the region. It will recommend a regional infrastructure fund as well as specific new funding opportunities from the state and federal governments, and will continue to emphasize the need to prioritize investment decisions based on the benefits they bring to the metropolitan area. The plan will highlight opportunities to take advantage of emerging transportation, communication, and data processing technology to improve the region's transportation network, and highlight related land use and economic impacts. Transportation investments that simultaneously solve multiple problems will be particularly valuable. For example, a transportation improvement that simultaneously reduces congestion, increases bicycle and pedestrian access, improves public health, and supports local economic development achieves multiple goals. Similarly, a stormwater solution that both provides recreational opportunities, improves water quality, and

reduces flooding is particularly important. Other examples abound, and will be highlighted throughout ON TO 2050.

ON TO 2050 will also recommend prioritizing investment in other areas beyond transportation. While the agency has a particular responsibility concerning transportation funding, using public resources effectively is a priority regardless of topical area. In fact, coordinating investment across topical areas – for example, linking transportation investment with housing investment, and using public investment to spur beneficial private investment – will be a high priority in ON TO 2050. This coordination is a necessity to achieve regional goals. For example, well-connected and frequent suburban transit requires supportive land use change to increase density, particularly employment, in areas where more transit is desired.

Increase transportation revenues at all levels

The federal, state, and local governments currently provide substantial funding to support the region's transportation system, but this revenue is insufficient to move the system to a state of good repair or make significant enhancements. Certain revenues, such as the state motor fuel tax, are forecasted to decline through 2050 as vehicle travel levels off and fuel economy rises. CMAP projects a \$25-45 billion shortfall of revenue by 2050 simply to maintain, operate, and administer the transportation system in the less than optimal condition of today; the available funding will not allow for additional improvements, enhancements, or expansions to the system. While the region's transportation providers have embraced efficiencies of many types and delayed critical projects for some time, the region's transportation funding resources are increasingly inadequate.

Regional transportation, civic, and private sector stakeholders must take action to secure sustainable transportation funding that will support economic competitiveness and a high quality of life. The plan will call for both state and regional revenue sources. At the state level, ON TO 2050 will echo GO TO 2040's call to raise and index the state motor fuel tax to inflation in the short term and will also recommend instituting a vehicle miles traveled fee over the long term. The plan will also strongly advocate for a sustainable regional funding source that can further augment state and federal sources. Finally, the plan will also advocate for expanding the sales tax base, instituting a federal cost of freight service fee, and increasing parking pricing. CMAP and transportation agencies should strongly encourage the state and federal governments to implement these revenue streams following the adoption of ON TO 2050.

Even if these new sources are extensively adopted, most revenues will need to be used simply to operate and maintain our current system. As such, ON TO 2050 will continue to allocate revenues with an emphasis on the existing system. The proposed Financial Plan expenditure categories will include first operating and maintaining the existing system in its current condition, then pursuing state of good repair, then implementing modernization efforts to gain efficiencies and improve traveler experience. As with GO TO 2040, ON TO 2050 will identify a very small number of expansion projects, weighing these projects against increasingly limited funding resources. CMAP will emphasize projects across pedestrian, bicycle, transit, and auto

modes, as well as projects that provide a broad range of transportation, land use, economic, and environmental benefits. Prioritized investment in a small set of projects – to ensure that every dollar is used as effectively as possible - remains a top priority.

Prioritize regionally significant projects

As the region’s long-range transportation plan, ON TO 2050 has an explicit responsibility to evaluate, prioritize, and generate a fiscally constrained program of major transportation investments. These are termed *regionally significant projects*, and they must create as much regional benefit as possible within the funding constraints that exist. Defining regional benefit is clearly an important matter, and ON TO 2050 will use quantitative criteria to evaluate project benefits. These criteria include:

Regionally Significant Project Evaluation Criteria

	All Road Projects	Expressway Projects	Transit Projects
Addressing Existing Needs	Pavement & Bridge Condition Congestion Reliability Safety	Pavement & Bridge Condition Congestion Reliability Safety	Asset Condition Capacity constraint Reliability ADA deficiency
Achieving Regional Priorities	Degree to which project serves economically disconnected areas Infill supportiveness Economic impact Freight benefits Natural resources impact	Degree to which project serves economically disconnected areas Infill supportiveness Economic impact Freight benefits GHG emissions Emissions near economically disconnected areas Natural resources impact Change in jobs accessible	Degree to which project serves economically disconnected areas Infill supportiveness Economic impact Freight benefits GHG emissions Change in jobs accessible
Improving Travel		Congestion reduction for trucks and autos Commute time by auto Potential negative impact on transit ridership	Commute time by transit Increase in ridership

This process of project evaluation will be similar to what was conducted for GO TO 2040, but there are some differences. First, a broader range of projects, including major arterial expansions, Arterial Rapid Transit (ART) and Bus Rapid Transit (BRT) services, are now considered regionally significant projects, while GO TO 2040 only considered expressway expansions and rail improvements. Second, the fiscal situation for transportation since the adoption of GO TO 2040 has worsened, primarily because the federal government, region, and

state have made no progress toward the new revenue sources recommended in GO TO 2040. It is expected, therefore, that ON TO 2050 will have even tighter fiscal limitation than GO TO 2040 despite the expanded universe of projects.

Strengthen the performance basis for other transportation programming decisions

Use of performance measures is important for all transportation decisions, not just those affecting large, regionally significant projects. CMAP has historically used performance measures related to congestion reduction, air quality, and others to evaluate projects for inclusion in the Congestion Mitigation and Air Quality (CMAQ) program and Transportation Alternatives Program (TAP).

Furthermore, the federal transportation program has changed dramatically in recent years to emphasize tracking performance, and now requires MPOs and states to set targets for traffic safety, pavement and bridge condition, travel time reliability, congestion, and transit asset condition. As a result, the plan will recommend increased use of performance measures for other programs, like the Surface Transportation Program (STP) and funds programmed by the Illinois Department of Transportation, among other agencies; these efforts are already underway. The plan will also place new emphasis on strategies to improve performance on these measures as well as link investment to those outcomes.

Finally, ON TO 2050 will explore using additional measures that measure co-benefits and relate to other regional goals, like health, infill and reinvestment, and the ability of all people to participate in the regional economy. The plan will also recommend that municipalities develop asset management systems to fully implement performance-driven investment and make the best use of the region's limited resources.

Plan for the transportation and land use impacts of emerging technologies

Emerging communications, data processing, and transportation technologies have great potential to change the way that we live, work, and move around the region. Residents today can already use technology to route and complete a multimodal trip, reducing dependence on automobiles and fostering walkable places. Retail shopping is increasingly occurring online, leading to new industrial development and more truck travel. New sensors and data processing are allowing transportation providers to quickly inform and reroute travelers. There is growing potential for connected and autonomous vehicles, which offer potential mobility benefits, but also potential negative land use change as residents are able to live further from job opportunities and amenities.

Technology will continue to change the shape of the region; we must continue to plan for the comprehensive impacts of these technologies. For example, communities may need additional strategies to protect vulnerable road users, like bikes and pedestrians, if on-demand delivery continues to place more trucks on the road or if autonomous vehicles proliferate. Transit may need to focus on core routes or develop innovative solutions to serve low-density areas if private ridesourcing continues to grow. To prepare, CMAP and other stakeholders should

continue to evaluate emerging technologies, establish principles and best practices to ensure that implementation supports regional goals, and assist municipalities in planning for change.

Focus infill, capital, and assistance in priority areas

Prioritized investment extends beyond infrastructure to the types of communities we build and the programs and policies that we pursue. Development within existing communities takes advantage of existing infrastructure, and provides significant regional benefits in terms of transportation, environmental, and fiscal outcomes. However, infill and reinvestment can be complex and costly to accomplish, due to difficulty in assembling parcels, dealing with multiple jurisdictions, remediating previously-used land, site preparation, and coordinating with existing neighbors. ON TO 2050 will recommend effective and coordinated investment by the public sector to reduce these barriers, increasing the viability of reinvestment.

First, reinvestment efforts should coordinate related transportation and land use efforts. For example, pursuing reconstruction of an intermodal truck corridor, while including green infrastructure along the corridor to address localized flooding problems and remediating nearby brownfields, would be more likely to spur successful industrial development than any of these investments in isolation. Similarly, local transit-oriented development (TOD) efforts should coordinate related transit and pedestrian improvements and plan for affordable housing and equitable TOD.

In addition, ON TO 2050 will recommend focusing reinvestment efforts, funding, and technical assistance in priority areas, particularly employment centers, transit-rich areas, downtowns and main streets, and disinvested areas. Identification of priority areas will, to the extent practical, build on local plans and goals, and help focus limited development, planning, and infrastructure funding resources. CMAP will develop a definition of these areas in concert with stakeholders and local governments, as well as encourage allocation of resources from housing, community investment, workforce training, and other entities to priority areas.

Consider short- and long-term goals for development at the edge of the region

Recognizing the central importance of local governments to our region's future, ON TO 2050 will have a particular focus on increasing municipal capacity, making fiscally sound development decisions, and investing in infrastructure to support that development. Development on agricultural, natural, and other open lands at the fringes of the region can be important to achieving community goals, but may also result in decreased market viability for agricultural uses, consumption and degradation of natural assets, and increased costs associated with constructing and maintaining new infrastructure and services. As a complement to ON TO 2050's continued emphasis on reinvestment in infill areas, ON TO 2050 will recommend that municipalities consider both the short- and long-term fiscal impacts of development and infrastructure expansion at the edge of the region's developed area. LTA may target planning assistance toward rural locations with high potential for growth to help communities strategically plan for these locations. The plan will also promote the use of conservation design, water supply coordination, and other environmentally sensitive practices

when development occurs in such locations, as well as the conservation of high quality natural areas across the region.

Much of the region's infrastructure is owned and maintained by its local governments. The plan will promote asset management by local governments to ensure sound management of infrastructure over its lifecycle, widespread use of capital improvement plans (CIPs), incorporation of mid- and long-term infrastructure costs into development decisions, and similar actions, all seeking to help municipalities make investments that meet both short- and long-term goals.

Moving forward with ON TO 2050

The region must take critical steps to renew growth and promote vitality through 2050. While current funding, socioeconomic, and development trends offer significant challenges, the region has many paths forward to achieve economic vitality and a high quality of life. Our strong transportation network, economic diversity, well trained workforce, and vibrant communities offer a solid foundation on which to build. ON TO 2050 will build on the principles of resilience, inclusive growth, and prioritized investment to offer strategies to move the region forward.

The ON TO 2050 plan will primarily be presented on the web, with a companion print piece. The online format will enable innovative approaches to illustrating the intersections between the plan's comprehensive recommendations, providing detailed implementation guidance to key partners, and improving the plan's accessibility. The web medium will utilize mapping of key policy areas, along with locally relevant recommendations, to aid communities in implementing key plan directions. This approach will help CMAP to better focus technical assistance and communities to understand how major recommendations might interact at the local level as well as identify and learn from peers who face similar challenges or opportunities.

CMAP has developed a substantive bank of research and analysis, public outreach, and stakeholder input to cultivate the findings and recommendations within this document. Strategy development will conclude in fall 2017, and this report represents the initial effort to synthesize the most critical directions from work to date. Following completion of the Alternative Futures engagement process in late summer 2017, CMAP will process the feedback received and calibrate plan recommendations accordingly. In addition, CMAP will continue to engage with stakeholders and the public as strategy development work concludes and the draft plan is developed.

Strategy Papers

- Climate Resilience
- Emerging Transportation Technology
- Energy
- Highway Operations
- Housing Supply and Affordability
- Inclusive Growth
- Integrating Green Infrastructure
- Lands in Transition
- Municipal Capacity
- Public Health
- Reinvestment and Infill
- Stormwater and Flooding
- Tax Policies and Land Use Trends
- Transportation System Funding Concepts
- Water

Snapshots

- Demographic Shifts: Planning for a diverse region
- The Freight System: Leading the way
- Infill and Transit Oriented Development
- Regional Economy and Clusters: Building our strengths
- Natural Resources
- The Transit Network
- Travel Trends: Understanding how our region moves

Additional Research Topics

- Asset Management
- Local Food
- Highway System Performance
- Placemaking
- Regional Economy
- Traffic Safety
- Transit Modernization