



MEMORANDUM

To: CMAP Committees
From: CMAP staff
Date: April 20, 2017
Re: Alternative Futures: Walkable communities

As part of ON TO 2050 development, CMAP is undertaking an “alternative futures” planning process focusing on exogenous factors that are largely beyond the control of any one entity, including CMAP and our regional partners. These factors include the environment, consumer preferences, technological advancements, and macroeconomic trends.

Based on research and feedback from stakeholders, CMAP envisions five different futures for the region, imagining life in 2050 where...

- Climate change impacts have intensified.
- More people have chosen walkable communities.
- The economy has transformed.
- Innovative technologies have enhanced transportation.
- Public resources are further constrained.

The Alternative Futures planning exercise, which draws upon ongoing CMAP work and ON TO 2050 products, will inform public engagement efforts to take place over the summer of 2017. CMAP will identify the key macro-level drivers shaping each future and their potential impacts. With written and interactive materials, staff will endeavor to illustrate life for residents and businesses in these imagined futures. With the assistance of committees, CMAP will also propose strategies that will help to mitigate potential negative outcomes and capitalize on opportunities that might arise. At the end of the project, staff will emphasize crosscutting strategies, that is, actions and policies that will help the region thrive across a wide range of possible outcomes.

This memo, the second in a series, will focus on a future in which more people prefer and choose to live in walkable, mixed-use communities. CMAP made assumptions about this future based on two key societal shifts. CMAP’s 2050 socioeconomic forecast estimates that residents



age 60 and older will nearly double between now and 2050.¹ As baby boomers downsize and our senior population continues to grow through 2050, many seniors may prefer places with accessible and walkable amenities. At the same time, consumer preference surveys indicate a growing desire for mixed-use communities with walkable amenities in both urban and suburban areas, most particularly among millennials.² Lastly, CMAP anticipates that technological innovations, specifically those that increase transportation options and ease transitions between transportation modes, will continue into the future.

In a future where consumer preference for walkable, mixed-use communities has markedly increased, people and businesses move to and invest in these areas. By 2050, reinvestment in many existing suburban downtowns and commercial cores has increased; some suburban areas have created new downtowns and mixed-use centers, as well as pedestrian and bicycle infrastructure. Certain jobs continue to concentrate in downtown Chicago and mixed-use centers, particularly in transit-accessible areas; consequently, disinvestment occurs in auto-oriented suburban areas. Residents increasingly bike, walk, use transit, on-demand ride services, and potentially even share driverless cars, leading to decreased demand for driving and parking. As demand for walkable communities has increased, affordable housing in these areas has become scarcer, particularly in communities with amenities and transit access.

Primary driver: increased preference for walkable, mixed-use communities

In 2050, a greater proportion of the population prefers and chooses to live in walkable, car-optional, mixed-use communities, due in part to demographic shifts and technological advances.

In this future, a large percentage of today's millennials and older baby boomers prefer walkable, mixed-use communities.³ This future assumes that subsequent generations (e.g., Gen Z, born in the late 1990s to early 2000s) would share these preferences. Compared to historical trends where the young and old prefer walkable places but seek out auto-oriented communities in middle age, in this future, preference for walkable communities is assumed to be, on average, high during the middle-age years as well. This future also recognizes that the location and built character of walkable, mixed-use communities varies. While typical urban areas will continue to grow, so will many suburbs with smaller-scale downtowns and nodes.

¹ CMAP Draft ON TO 2050 Socioeconomic Forecast developed by Louis Berger.

² Urban Land Institute, "[America in 2015: A ULI Survey of Views on Housing, Transportation, and Community](#)," 2015.

³National Association of Realtors, "[Demand for Walkable Communities](#)," March 2017.



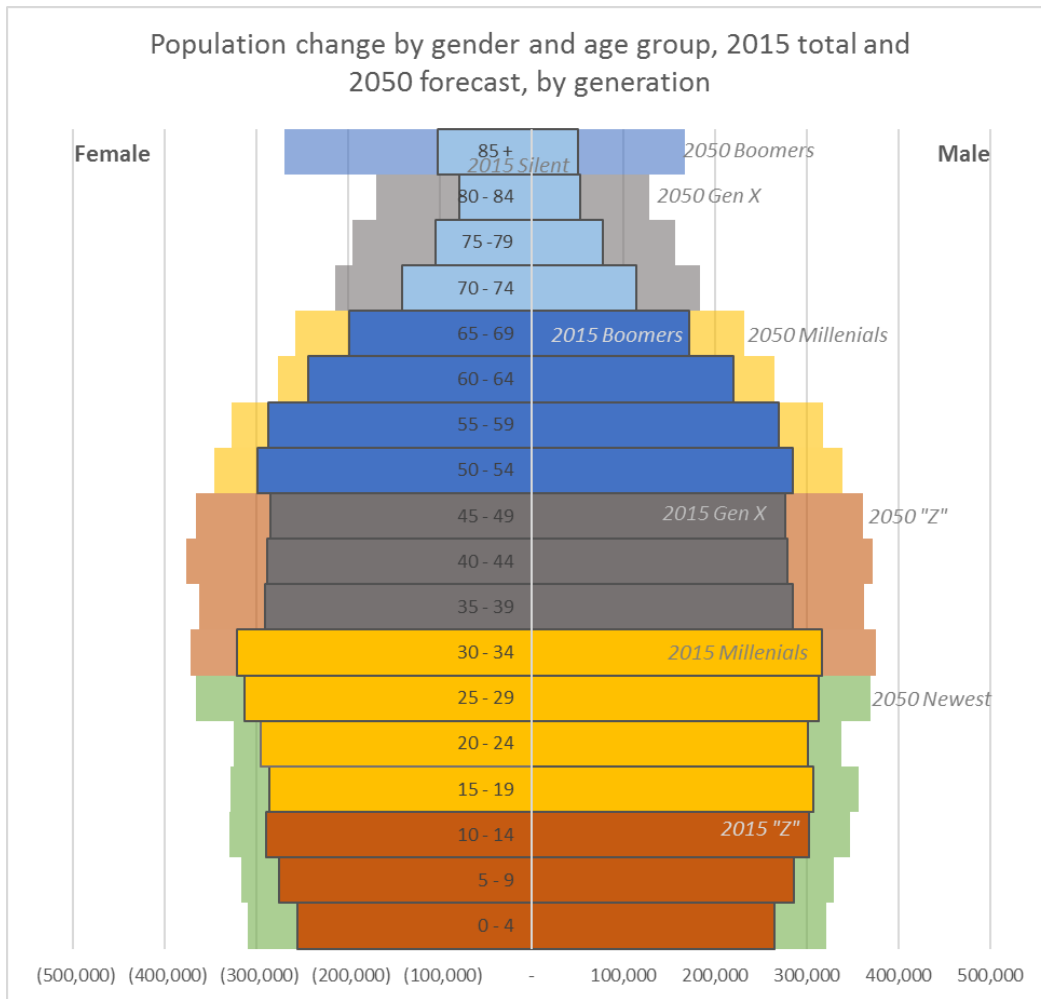
Young adults would be attracted to walkable, mixed-use communities because they would be able to fulfill many of their daily needs within their neighborhood without depending on a car, and because of the attractiveness of nearby amenities. Delayed household formation⁴ and slower wealth accumulation would also influence their geographic and housing preferences. Due to the convenience and vibrancy of walkable, mixed-use communities, many young adults may want to remain in areas with these amenities as they start families, raise children, and care for aging parents, even as their needs for housing and other amenities change. Senior citizens would also prefer these neighborhood types because they allow for continued independence and access to medical services, social networks, and everyday needs without needing to drive. By 2050, the Chicago region would have seen decades of increased, and continued, preference for walkable and transit-served neighborhoods as several demographic cohorts pass through young adulthood and eventually age into their senior years. The large size and long life expectancies of the Baby Boomer, Millennial, and Gen Z generations combined would drive sustained, increased demand for these neighborhood types.

Residents under 35 and seniors will continue to make up a significant proportion of the region's population through 2050, making planning for these groups critical (see Figure 1). The demand from seniors will be particularly acute, as 29 percent of households in the region will be headed by someone over the age of 65 in 2050. In 2050, the region will be at a point parallel to today; just as baby boomers are just now becoming seniors, older millennials will be 65 in 2050.

⁴ Household formation occurs when a group of people begin living together (e.g., roommates, unmarried couples, nuclear families, etc.).



Figure 1. Population change in CMAP region, 2015 to 2050



Source: CMAP Draft ON TO 2050 Socioeconomic Forecasts, completed by Louis-Berger.

Advances in technology, such as bike sharing, car sharing, and on-demand ride services would facilitate car-optional lifestyles. On-demand services run by private companies or public transit agencies could offer a variety of vehicle types, and many of them could use advanced routing to pick up and drop off multiple passengers on a single trip. Some of these vehicles could even be automated and capable of functioning without a driver. This same technology could be used in driverless freight applications to provide rapid delivery to homes and businesses. Due to cost constraints, automated technology would not be widely available for individual purchase. Telecommuting and on-demand delivery would also be more popular, with more people working and shopping from home or their neighborhoods.



Life in 2050 with increased preference for mixed-use, walkable communities

Walkable, mixed-use development patterns increase throughout the region.

The sustained demand for walkable, mixed-use communities would lead to an increase in this type of development. Historically vibrant, amenity-rich, mixed-use areas would continue to thrive. While some would have welcomed new, often higher density, developments to accommodate demand, others would seek to maintain their existing character.

Some disinvested urban areas and suburban downtowns, especially those with transit access and diversity of land uses, could experience reinvestment, including decreased commercial vacancy and increased population and employment; others could struggle to tap into the market demand and continue to experience disinvestment, despite their existing assets.

Suburban, residential neighborhoods that are largely auto-oriented but have downtowns or commercial nodes, would also see population growth as well as revitalization of their downtown areas. Many communities that did not have walkable downtowns or commercial areas in 2017 could strive to attract residents and jobs by creating downtowns and mixed-use nodes through rezoning and investments in pedestrian and bicycle infrastructure.

Communities with the fiscal and technical capacity, as well as existing supportive infrastructure, would be at an advantage in these efforts. Communities that are unable to create walkable, mixed-use areas could experience disinvestment, as demand for auto-oriented living decreases.

Jobs in knowledge, service, and retail locate near transit and population centers, while intermodal and warehousing jobs continue to locate in less dense, auto-oriented parts of the region.

Employers in knowledge, service, and retail industries would increasingly locate in places that are transit accessible and near other amenities to attract and retain talented employees, many of whom would prefer to live and work in vibrant communities and commute without a car. Furthermore, due to the increase in telecommuting and online shopping, the need for brick and mortar retail and offices spaces could decrease.⁵ Commercial uses would consolidate and cluster where they are most viable: in vibrant, dense downtowns, corridors, and mixed-use areas, particularly those that are transit-accessible. Communities with better transit access would find that property values and rents in their commercial areas increase. Businesses with small profit margins would not be able to, or would not want to, stay in their current locations. Intermodal and warehousing facilities as well as most manufacturing firms would remain space-intensive employers that require high freight access and often incompatible with residential and retail

⁵ Kapner, Suzanne, "[Retail Slump Shows Amazon Effect](#)," May 2016.



uses. These industries would remain in auto-oriented areas with lower land values and fewer land use conflicts.

More people use shared modes, active transportation, and transit. Car ownership rates decline.

Technology would make shared modes of transportation more desirable by expanding service areas, reducing wait times, and improving connections between different types of transportation. Because fewer people would own their own cars, they often use several modes on one trip, depending on which is cheapest, fastest, or most convenient. For example, they may walk or bike to a transit stop, then take a train the rest of the way to work. On the way home, they might hail a ride home from the train station in a shared vehicle instead of walking or biking in the dark. Public transit would remain the backbone of a multimodal transportation system. With more people using public transit for part or all of longer trips, transit agencies could find themselves with increased fare revenue and public support, but also greater maintenance costs and greater demands for quantity and quality of service. However, they would also face competition for space and fare revenue from private transportation services. Routes that have dedicated right of way and connect people to job centers could see the greatest growth in ridership. On-demand delivery services could replace many shopping trips, and freight traffic could increase on local roads. Decreased personal vehicle travel could reduce the need for additional road network capacity, but the region's roads would still be congested, particularly in places with substantial freight traffic. Absent careful planning, there would be more conflicts between freight delivery vehicles and vulnerable road users, like pedestrians and cyclists.

High-cost walkable, mixed-use communities become increasingly segregated, while more affordable auto-oriented areas diversify.

Increased demand to live and work in walkable, mixed-use neighborhoods would lead to higher cost of living in these areas. Particularly desirable neighborhoods, such as amenity-rich, transit-served areas, would become higher cost. The high-cost neighborhoods that today have lower (and in some cases, moderate) income residents and businesses could experience displacement (see “disproportionate impacts” for further discussion). By 2050, high-cost communities would be made up of predominantly higher income and college-educated residents, the majority of whom are white, as lower-income residents and some communities of color would continue to face entrenched barriers to employment and education. Lower-income residents, residents with fixed-incomes (e.g., seniors), and communities of color would have to relocate to more affordable areas, some of which are walkable but offer few amenities (especially transit access), and many of which are entirely auto-oriented. These more affordable areas would become more diverse – racially and ethnically.



The region reduces per capita greenhouse gas emissions, and development pressure on agricultural and natural resources eases.

Smaller housing units and buildings that are part of denser development patterns, like town houses and apartment buildings, are more efficient to heat than larger single-family houses, and residents of smaller buildings in denser developments consume less energy.⁶ As more people live in mixed-use or multifamily buildings and the size of single-family housing units decline, energy use and greenhouse gas emissions per capita in the Chicago region would decline. The decline of retail and office square footage would also decrease energy consumption in the Chicago region, as these uses are relatively more energy intensive than warehousing and storage facilities. Furthermore, new technologies could provide opportunities to further improve the energy efficiency of the region's buildings. Because people drive less, they would consume less gasoline, and passenger vehicle carbon emissions would decline. Despite increased freight traffic, emissions from freight vehicles would not have increased dramatically because of improved fuel efficiency and advances in routing and logistics. Overall emissions from the transportation sector would decline.

As infill development becomes more attractive, municipal boundaries could expand at a slower rate, if at all. Development in areas with existing transportation and water infrastructure could help municipalities maintain existing streets and sewers and avoid the financial and environmental cost of expanding infrastructure. As development pressure on the fringe of the region decreases, natural lands and agricultural resources could continue to provide ecosystem services and economic value to the region. Municipalities and conservation organizations could be able to permanently conserve large, undeveloped natural areas for trails, habitat restoration, high-quality natural areas, and agriculture.

Walkable mixed-use communities provide residents a higher quality of life.

Relatively newer municipalities that experience rapid population growth would have to expand some systems, such as water treatment facilities, to accommodate new residents. However, local governments would be able to provide higher quality and/or more efficient services and amenities like garbage collection, public safety, water treatment, and public education, as the per capita costs of these services decrease as population density increases.⁷ Many more established municipalities would need to invest a substantial portion of those savings in updating and maintaining systems that have reached the end of their designed lifespan.

Moreover, residents of walkable communities could benefit from a healthier and safer environment, as neighborhoods with more foot traffic provide significant opportunity for interacting with neighbors and visitors, increasing “eyes on the street” and strengthening social ties. Seniors and single-person households, in particular, could benefit significantly, as the

⁶ U.S. Department of Energy, “[2011 Buildings Energy Data Book](#),” 2012.

⁷ CMAP research has shown that higher density developments have a lower per capita cost of service provision.

⁸ Chicago Metropolitan Agency for Planning, “[Fiscal and Economic Impact Analysis of Local Development Decisions](#),” 2014.



neighborhood network helps reduce loneliness and isolation. The improved social network in these neighborhoods provides a safety net of people who can provide assistance during emergencies and will notice if something is amiss.⁹

Disproportionately impacted communities

The cost of living in walkable, mixed-use communities would increase, particularly in those that are transit-served. As these areas see higher demand, many property owners and renters would face financial pressure. Renters would see the cost of renting increase more quickly than their wages or revenue, and the number of renter households paying 35 percent or more of income toward rent would increase.¹⁰ If these households move further away from transit services for cheaper housing costs, their combined household and transportation expenditures could exceed 45 percent of their income. While the increase in land values could benefit some property owners, others may not be able to afford increased property taxes and may be forced to sell. Some small businesses, facing the dual challenges of a changing consumer market and rising real estate costs, may no longer be profitable. In communities and neighborhoods where there has been little new development and minimal increase in housing supply to meet demand, affordability challenges would be particularly acute.

Ultimately, living in these highly sought after areas – either as a renter or owner – would be out of reach for some segments of the population. Lower income residents, including immigrant groups, would move to more affordable neighborhoods that are more auto-oriented and/or are farther from job centers, social services, and the community networks they rely upon. Low-income seniors, people with disabilities, and those with limited English proficiency could be particularly isolated in communities that have less experience and capacity for serving these residents. Some communities that become home to immigrant groups could struggle to accommodate the language and other needs of these residents, and to adapt to the demographic changes.

While many communities in the region stand to benefit from increased investment in their commercial cores and downtown areas, some would lack the institutional and civic capacity to capitalize on their existing assets or sufficiently adapt to the market, demographic, and fiscal changes. Historically disinvested communities would need assistance to attract investment, plan for growth, and establish policies that ensure that investment is sustainable and benefits existing residents.

New areas of disinvestment may also arise. As demand shifts towards walkable, mixed-use development, there would be an accompanying decline in demand for auto-oriented, single-use commercial or residential areas far from activity centers. Communities without much land use

⁹ Harms, William, “[AAAS 2014: Loneliness is a major health risk for older adults](#),” February 2014.

¹⁰ Based on the American Community Survey 5-year survey estimates (2011-2015), approximately 40 percent of households in the region paid rent that was 35 percent or more of household income.



diversity would need to adjust to the new market realities and explore alternative development types and sources of revenue. Some of these communities may remain attractive to industrial firms, freight facilities, and those who work in those industries. As these firms continue to locate in auto-oriented locations, their workers would likely need to commute by car or face long transit commutes. High travel costs may put employment in these industries out of reach for some otherwise qualified workers.

Strategies to Prepare for Increased Demand for Walkable Communities

CMAP and partners should focus investments in areas that are expected to see the greatest increase in demand in this future, specifically, mixed-use communities and transit served areas. CMAP and partners should also pursue strategies for communities that choose to preserve their character or are facing negative impacts such as new or exacerbated disinvestment or widening housing affordability gap. Below are broad strategies to prepare for a future with increased demand for walkable, mixed-use development. These strategies are described in more detail in related CMAP strategy papers and research (see Attachment). Each broad strategy may include questions for stakeholders that will help CMAP better understand preferences or develop messaging about the issues or solutions. These questions may be included in future engagement with stakeholders.

1. Help communities overcome barriers to mixed-use development

With a large transit system, road network, diverse economy, as well as existing main streets, downtowns, and commercial corridors, many communities in the Chicago region would have the foundation to accommodate the increased number of residents who wish to walk or take transit to work. Mixed-use development, however, often faces greater financial, regulatory, and community constraints than other development types. Financing is more complex, involving multiple funding streams. As the market desires this type of place more strongly, financing will become easier. However, obsolete zoning codes and regulations may not allow mixed-use development or require inflated parking minimums that make compact development difficult. Even with transit availability, community members may still be wary of potential impacts to congestion and parking, particularly if transit service is infrequent. Residents may also perceive new developments, particularly those that increase density, as drastically changing community character.

CMAP and partners can help communities create more mixed-use, walkable environments through local planning and implementation. This effort includes aligning investments and coordinating planning for land use, transportation, housing, infrastructure, and services. For example, CMAP can help partners coordinate parking and adjacent land uses, such as



commuter rail parking across stations to maximize efficiency. Streets and roads will have to be redesigned for a future with less demand for car parking, more bike and pedestrian usage, and changing freight needs in response to more frequent on-demand delivery. Zoning codes and other ordinances will also have to be updated to achieve community goals. For communities with downtowns and mixed-use areas that are not served by high quality transit that comes at frequent intervals, CMAP and partners can develop land use strategies that increase densities to transit supportive levels. CMAP and partners can also help communities plan for infrastructure investments, such as green and gray stormwater infrastructure that will help reduce urban flooding. Partners can also help to combat fears against density and new development through education infill benefits and impacts of new development.

Key questions about this strategy:

- What are the most common fears about new development that increase density?
- What are the best strategies to address concerns about new developments that may increase density?
- Infill development has many benefits. What benefits most resonate with you?

2. Incorporate market feasibility into planning and implementation processes

For developments to be successful, developers consider market factors such as demographics, costs, and competition, among others. Many of these factors would likely look significantly different in 2050 than they do today. A larger share of residents will be older and from populations of color; significant consumer preference for mixed-use neighborhoods with transit access would lead to greater demand in or near those neighborhoods; and retail and many jobs would follow households to these neighborhood types. Some desirable communities may see upshifts in the market and may want to address the changing demographics and potential displacement issues that may arise. On the other hand, other neighborhood types such as auto-oriented employment centers or low-density residential neighborhoods may experience disinvestment, as residents or businesses leave for transit-served, amenity-rich neighborhoods.

CMAP and partners should help communities plan for these changing demographics and consumer preferences by incorporating immediate and long-term market feasibility into planning and implementation processes. More information, such as data on demographic changes and projections, will assist local implementers and developers. Local planning and development can assist neighborhoods that must re-align their existing land uses to adjust to market shifts. CMAP and partners can also help align local community goals, such as increased sales tax revenue, with broader regional goals, such as regional economic growth, through greater interjurisdictional cooperation.

Key questions about this strategy:

- What are the biggest challenges to market feasible planning?



3. Strengthen lower capacity and disinvested communities

The increased demand for walkable, mixed-use neighborhoods would create challenges for some communities. Lower capacity and disinvested communities with the existing foundations to support walkable, mixed-use neighborhoods would find it difficult to dedicate financial resources or utilize planning tools to tap into market demand, leading to continued disinvestment. Auto-oriented communities without downtown centers would face a weakened market due to people and businesses relocating. While some of these communities would want to develop new walkable, mixed-use areas, others will want to maintain their existing character and focus on attracting new industries or land uses.

CMAP and partners should develop and implement strategies to help all communities take advantage of or adapt to long-term shifts in market demand. CMAP and partners can strengthen communities' technical capacity by way of trainings, making information on best practices widely available, as well as offering direct planning assistance with comprehensive and sub-area plans, zoning code updates, and market studies. CMAP should also advocate for partnerships such as service sharing that would allow communities to maximize the financial resources they have. For disinvested communities, CMAP and partners should offer an even more comprehensive suite of solutions to overcome the complex physical, financial, and social barriers to reinvestment. For instance, CMAP can help advance spatial understanding of the nature of investment and disinvestment, and encourage innovative solutions to problems with vacancy and abandonment, such as land banking and vacant building and adaptive re-use ordinances. CMAP and partners can also work to build stakeholder and private sector capacity and enhance partnerships with lending institutions and nonprofits.

Key questions about this strategy:

- What types of assistance are most important for communities, particularly those with limited staff and financial resources, seeking to become more walkable or develop mixed-use projects?

4. Increase housing choice for all residents

In a future with sustained demand for walkable, mixed-use communities, cost of living in these areas would increase, while the existing housing supply – across various housing categories, including tenure, size, price point, and accessible design – would be insufficient to accommodate the diverse needs and preferences of households. CMAP and partners can address these challenges by increasing housing choice, particularly for disproportionately impacted populations. Housing choice is the ability for all households in the region, regardless of size, income, age, or ability, to find a quality affordable home that fits their preferences and needs throughout all stages of life.

CMAP and partners can promote housing choice by emphasizing the construction and preservation of housing stock diversity (e.g., owner and rental units; units of multiple sizes; accessory dwelling units; shared housing; senior congregate housing etc.) and affordability, with a focus on areas where cost of living might be particularly high, such as walkable, mixed-



use communities that are amenity- and transit-rich. CMAP and partners should also focus on the specific housing needs of seniors, given that a greater proportion of households will be elderly.

Historically, achieving housing choice has been particularly challenging when developments increase density or include affordable units, in part due to regulatory environments and community and political constraints, as well the market feasibility challenges associated with affordable housing. To overcome these barriers, partners should take the lead in fostering more community and political support, while CMAP should examine tools, regulations, and funding mechanisms to preserve or create different housing types.

Tools may include increased renter protections, non-traditional tenancy structures, and first right of purchase for public agencies. Regulatory strategies may include updating zoning codes to allow increased stock diversity and density in key locations, and inclusionary zoning ordinances in markets with high housing demand and development. Finally, CMAP should research how federal and state housing finance regulations impact the region and its various housing markets, as well as best practices on funding and project selection criteria so that transportation investment decisions take into consideration housing choice.

Key questions about this strategy:

- What type of housing will be most important to preserve or create in your community?
- What strategies for increasing housing choice would be most effective in your community?
- What is the biggest community or political barrier to increased housing affordability?

5. Build human and community capital

Persistent economic inequality would likely remain a problem in a future with greater preference for walkable, mixed-use communities, and becomes especially challenging in areas where cost of living has increased. To address these challenges, CMAP and partners should place emphasis on inclusive growth strategies that build human and community capital. For instance, providing workforce training that focuses on making quality jobs in industries that offer pathways for upward mobility – particularly those in transit-served employment centers – attainable for a broader range of the region’s population. Access to jobs, credit and capital, and quality education would also be critical for participating in the future economy. Through coordinated efforts to improve access to opportunity, CMAP and partners can slow the displacement of lower-income residents from their communities and encourage sustained regional economic prosperity.

As discussed earlier, many auto-oriented communities would likely experience an influx of lower-income and immigrant residents who cannot afford to live in walkable, mixed-use communities. These communities will face distinctive challenges in advancing inclusive growth. CMAP and partners should help these communities form new partnerships with non-profit



agencies and other municipalities that have experience working with these demographic groups. CMAP and partners should also encourage connection between municipalities and local banks to attract increased private-sector resources for community reinvestment.

Key questions about this strategy:

- What are the biggest barriers to increasing transit access in communities with lower quality or no transit service?

6. Focus transportation investments on managing arterial congestion and safety, efficiently moving freight, and enhancing public transit service

In a future with increased preference for car-optional lifestyles, the balance of traffic on the region's streets would change, with a higher percent of shared vehicles, bicycles, and pedestrians, as well as more freight delivery vehicles. Municipalities would need to redesign their local streets to assign appropriate space for transit, pedestrians, cyclists, freight vehicles, and freight and passenger loading zones to ensure the safety of all road users. Decreased personal vehicle travel would reduce the need for additional road network capacity, but the region's roads will still be congested, particularly in places with substantial freight traffic. The region's highway system would need to be maintained to provide fast, reliable travel for transit vehicles as well as freight traffic. CMAP and transportation agencies would need to identify critical freight congestion bottlenecks and priority transit routes and incorporate advanced communication technologies, like coordinated signals, sensors, and traffic management centers on roads, rail lines, and vehicles.

As the backbone of a multimodal passenger transportation system, public transit would play an even more important role in the region's economic vitality. Public transit agencies should prioritize investments in maintaining and expanding dedicated transit right of way on high-frequency routes that serve mixed-use centers and employment clusters. Transit agencies and municipalities would need to coordinate as they plan for new development and expanded public transit service. CMAP and transit agencies should take into account local plans for reinvestment and development as they prioritize infrastructure investments, and municipalities seeking additional transit service should involve transit agencies in development review. CMAP, transportation agencies, and municipalities should ensure that investments in multimodal infrastructure benefit all residents and continue to prioritize projects that improve access to jobs, education, and other needed goods and services for excluded communities.

Key questions about this strategy:

- What types of transportation investments should be the highest priority for the region?



7. Improve connections between shared and active modes of transportation

Improving ease of connection between multiple modes of transportation is already a primary demand of residents in the Chicago region. In a future with increased desire for car-optional lifestyles, investments that facilitate seamless transfers between modes would be even more necessary. Transit agencies, private companies, and municipalities should work together to expand access to “last mile” transportation options, including expanding the network of bikeshare stations, encouraging peer-to-peer and employer-sponsored carpool programs, and providing innovative demand-responsive transit and paratransit service. They should collaborate on mobility hubs that include transit stations, bus stops, bike share stations, and drop off/pick up stations. Municipalities should also plan for transit-supportive densities near transit hubs to ensure the feasibility of these amenities.

Data and communication technology are a critical piece of improving connections between modes. Transit agencies should continue to invest in technology like Ventra that allows for seamless trip planning and payment across several services. Combining data from multiple sources can help improve operations, identify gaps in the region’s existing transportation ecosystem, and implement and evaluate new policies and services. Partnerships with private shared mobility providers should include provisions for data sharing.

Seniors, people without bank accounts and/or with low incomes, and people with limited English proficiency may have difficulty using new modes of non-motorized transportation. Transportation agencies should consider ways to expand access to these transportation options, through fare discounts and subsidies, alternative payment methods, and education.

Key questions about this strategy:

- How should the region prepare for technological advances in transportation?
- What should the primary goals be for partnerships between transit agencies and private transportation services?
- How do you think people will use shared modes in the future? What would you be most concerned about if private shared modes become more common?

8. Explore and develop new funding mechanisms for transportation infrastructure

The revenue collected from traditional sources of transportation funding, particularly the state motor fuel tax, is already insufficient to make needed investments in the transportation system. In a future with declining gas consumption, the state would need to replace the motor fuel tax with other sources of revenue to maintain the transportation system. CMAP generally recommends a vehicle-miles traveled (VMT) fee, a direct user fee that is levied on a per-mile rather than per-gallon basis. This mechanism offers opportunities to integrate with other types of facility-level pricing or vehicle-specific pricing, and allows policymakers to set appropriate rates for privately owned vehicles, shared fleets, and non-passenger vehicles. However, in a



future with declining auto travel, a VMT fee alone would not be a sufficient and sustainable funding source. The region would still require new revenue sources in order to maintain and expand the transportation system.

Increased transit ridership would increase fare revenue, but would also present challenges for managing demand and maintaining a state of good repair. Variable transit fares may help manage demand on the transit system, but additional revenue sources will still be necessary to make new capital investments. New fees, taxes, or other revenue sources from private shared mode services should also be explored. Municipalities and transit agencies would also need to identify new funding streams for expansions of shared mode and active transportation infrastructure, which will be in higher demand in walkable communities. Some strategies for specific transportation infrastructure projects may include public/private partnerships and value capture. CMAP should continue to play a leadership role in evaluating potential new funding sources and financing strategies for transportation infrastructure, taking care to avoid disproportionate burdens on low-income populations or undue risk to public entities.

Key questions about this strategy:

- Would you support a VMT fee?
- Even if a VMT fee were implemented, the region would still require new revenue sources in order to maintain, enhance, and expand the transportation system. What additional revenue sources for transportation infrastructure would you support?
- Would you support higher transit fares in order to maintain or improve transit service?
- If fewer people own cars, we will need to invest in the transit system. What types of transit investments should be our highest priority?
- With less revenue, what types of transportation investments should be the highest priority for the region?

9. *Employ a balanced local revenue and land use mix*

In a future where online retail replaces many brick and mortar retail establishments, particularly in auto-oriented areas, communities accustomed to relying primarily on commercial property and sales tax may find themselves with a lower base from which to draw tax revenues. A low tax base can contribute to reduced services and amenities, as well as high property tax rates, which can discourage economic development, leading some communities to fall into a cycle of low economic growth.

To support communities experiencing land use changes, CMAP and partners should encourage communities to pursue a healthy mix of land uses, as well identify refinements to the tax structure so local governments can provide sufficient revenue to meet community goals. For example, expanding the sales tax base to include additional services allows communities with non-sales tax generating businesses to generate additional revenue and incentivizes non-retail



commercial land uses. Relying on a variety of land uses and revenue sources would improve stability of municipal revenue, allow municipalities to more consistently maintain services and existing tax rates, and provide more amenities or options for residents. Increased revenue predictability would also improve municipalities' ability to undertake financial planning.

10. Strengthen natural land protection and stewardship and regional agricultural systems

As development pressure on agriculture and open space eases, increased conservation could be possible. CMAP and partners should develop and implement strategies to capitalize on this opportunity. By assisting communities with coordination of land acquisition, prioritization of restoration efforts, and preservation of farmland and natural resources, CMAP and partners can maximize the benefits of natural land protection and stewardship, and increase the diversity and resilience of the commodity export system and the local food market. Specific activities can include refining key natural areas, identifying key agricultural assets, and performing analysis to demonstrate the economic value of farmland and agricultural uses. CMAP and partners can also explore financing strategies and reestablish substantial and reliable state funding sources for land preservation and stewardship. Communities struggling with disinvestment due to declining demand for auto-oriented uses can reduce blight and maintain economic vitality by restoring and enhancing existing community-scale open spaces, and repurposing vacant areas for new open space and other recreational uses. CMAP and partners can assist with these efforts through local technical assistance.

Key questions about this strategy:

- How important is it to preserve our region's key agricultural areas?
- Whose responsibility is it to preserve high quality natural areas? How should preservation efforts be funded?

Next Steps

Following committee review and feedback, staff will finalize this memo and use it to inform the development of an online survey platform, MetroQuest, which will allow residents to learn about and select preferences for strategies to prepare for increased preference for walkable communities. In addition, CMAP has deployed interactive kiosks across the region, illustrating the key features of a future with more demand for walkable neighborhoods, along with the other four alternative futures. The kiosk content is accessible via the CMAP website. The MetroQuest survey and kiosks will be central to an intensive public engagement period from now through August 2017.

Four other potential futures for the region have also been selected for exploration. These futures will be oriented around what the region would be like if climate change impacts intensified; if



the economy transformed; if significant technological advances improved mobility; and if federal and state public resources diminished significantly. Staff will also develop a final memo where the recommendations in ON TO 2050 strategy papers will be analyzed through the lenses of the five alternative futures; the strategies that apply across many of these futures will help to inform which strategies to prioritize in ON TO 2050, which will be completed in October 2018.



Attachment: Related CMAP Strategy Papers

Strategy	Related CMAP ON TO 2050 Strategy Papers
1. Help communities overcome complex barriers to mixed-use development	Reinvestment and infill, housing supply and affordability
2. Incorporate market feasibility into planning and implementation processes	Reinvestment and infill, tax policy and land use trends
3. Strengthen lower capacity and disinvested communities	Municipal capacity, reinvestment and infill, inclusive growth
4. Increase housing choice for all residents	Housing supply and affordability
5. Build human and community capital	Inclusive growth, reinvestment and infill, tax policy and land use trends, housing supply and affordability, human capital, innovation, and clusters
6. Focus transportation investments on managing arterial congestion and safety, efficiently moving freight, and enhancing public transit service	Transportation systems funding concepts, asset management, highway operations, transit modernization, freight strategic directions
7. Improve connections between shared and active modes of transportation	Transit modernization, transportation technology, highway operations
8. Explore and develop new funding mechanisms for transportation infrastructure	Transportation systems funding concepts, transportation technology, highway operations
9. Employ a balanced local revenue and land use mix	Tax policy and land use trends
10. Strengthen natural land protection and stewardship, and regional agricultural systems	Lands in transition, integrating green infrastructure

