The northeastern Illinois region needs and deserves a worldclass transit system. This requires attention to not only how transit operates, but how it is perceived. A system that functions well, with on-time and frequent service and seamless connections between modes, is a necessity. But so are features that make transit attractive, such as clean stations, modern transit vehicles, and clear information.

For many people today, transit is an option of last resort due to concerns (whether real or perceived) about personal safety, delays, or infrequent service. Many others would like to use transit but lack access to service that meets their needs. GO TO 2040 recommends making transit the preferred travel option for as many of the region's residents as possible. The region's transit system should be strengthened through the following recommended actions:

Improve the fiscal health of transit by increasing investment levels and addressing cost increases.

Improve the operations of the region's transit system, focusing investments on maintenance and modernization.

Pursue a limited number of high-priority major capital expansion projects.

Conduct supportive land use planning, make small-scale infrastructure investments, and provide other local support to make transit work better.

The continual financial challenges facing the transit system have been caused by both insufficient funding and rapid increases in costs. Both of these need to be addressed to restore the transit system to fiscal health. Additional funding is needed to support the transit system, and a portion of revenue from new transportation funding sources, including implementing congestion pricing on some expressways and increasing the state gas tax, should be devoted to transit. The transit operators, including the Chicago Transit Authority (CTA), Metra, and Pace, as well as the Regional Transportation Authority (RTA), should also make a concerted and unified effort to control costs and improve service efficiency.

Public transit should be improved through maintenance, modernization, and expansion. By steadily moving toward "a state of good repair" — in which all facilities are maintained in good condition, with no backlog of capital maintenance — the region can save more costly repairs and benefit from operational improvements, including increased reliability and comfort that contribute to riders' confidence in the system. Modernization of transit includes technological improvements that improve system performance but also those that improve user perceptions of transit. Expansion of bus service into underserved areas, using the state-

of-the-art technologies and operational concepts, is supported by GO TO 2040; these expansions should be carefully prioritized to ensure their success. The plan also supports new high-speed rail and encourages the federal government to pursue this, but cautions that new federal spending on high-speed rail should not come at the expense of support for the regional transit system.

While maintenance, modernization, and strategic improvements are the main priorities of GO TO 2040, a limited number of major projects are recommended, including the West Loop Transportation Center, CTA Red Line South extension, CTA north Red and Purple Line improvements, and improvements to Metra's Union Pacific (UP) rail lines, SouthWest Service, and Rock Island line. For the most part, these projects improve existing infrastructure rather than add extensions or new services. The advent of high-speed rail prompts CMAP to recommend creation of the West Loop Transportation Center. A necessary project for our region to become the hub of a Midwest high-speed rail network, it also will have significant immediate benefits to Metra service and will improve connections between Metra and CTA. Recommended capital improvements also include managed lanes on the I-90 and I-55 expressways and a multimodal corridor on I-290 that may include Bus Rapid Transit (BRT) or other transit options.

Land use planning and small-scale infrastructure improvements to support transit are critical, and often make the difference in the success of transit service. CMAP supports transit oriented development (TOD), and seeks to broaden the definition of transit-supportive land use beyond areas around train stations; in considering transit-supportive land use, GO TO 2040 includes support for bus service, including Arterial Rapid Transit (ART) and BRT, as well as rail. The plan recommends the development of funding and incentive programs for transit-supportive local planning.

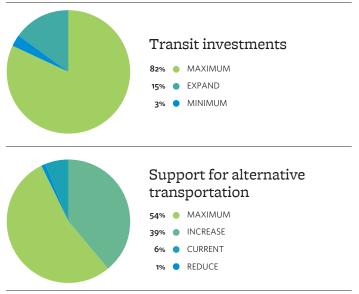
The following section describes benefits, defines current conditions, explains the importance of investing in transit, and provides details about the recommended actions, including costs and financing.

### 11.1 Benefits

Public transit is identified as an important part of the transportation system in the GO TO 2040 Regional Vision, which calls for a "broad range of integrated and seamless transportation choices that are safe, accessible, easy to navigate, affordable, and coordinated with nearby land use."

Strong public support for transit was expressed during the engagement activities that CMAP conducted during summer 2009. Over three-fourths of workshop and online participants favored maximizing our investment in transit, and many emphasized the importance of transit in their comments (see **Figure 59**). In communities that already had transit coverage, participants wanted to preserve their existing service and improve it; in communities with limited transit service, there was strong support for expanding transit to include new areas.

Figure 59. Preferences of transit investments and policy



Source: CMAP GO TO 2040 "Invent the Future" participants, 2009

A strong transit system provides many benefits to the region, including:

Improvements to mobility, allowing travelers to avoid congested roadways, and improving travel times both for people who use transit and for those who drive.

A high return on public investment through simple maintenance of the current transit system, and an even higher return when increased investment is tied to land use policies that encourage transit use.

Lower household transportation costs compared to automobiles, providing important travel options for lower-income residents.

Reduced emissions of pollutants and greenhouse gases through decreased energy consumption.

Increased value of land, helping to support transit oriented development or reinvestment projects.

#### **Economic**

The primary economic benefits of transit come through the additional mobility that it permits. With a strong transit system, residents have more choices concerning where they can live and work and how they travel, and can avoid the harmful effects of congestion. In a 2007 report on public transit's impact on the economy, Chicago Metropolis 2020 found that simple maintenance of the current transit system would provide a 21-percent return on investment (i.e., a \$1 investment would yield \$1.21 in saved jobs, new jobs, and time saved for commuters), while greater levels of funding could return up to 61 percent if the funding was tied to land use policies that encourage transit use.¹ Essentially, the more money that is invested in the public transportation system, the greater the potential return on investment for the region. Much of this economic benefit is due to reduced congestion, because providing transit options improves travel even for people who continue to drive.²

Using transit is also less expensive for an individual than owning and maintaining an automobile, and transit systems provide important travel options for lower-income residents.

The annual cost of owning, maintaining, and commuting by car averages \$12,500 per year in the region; in comparison, regular commuting on the CTA costs around \$1,000 per year with monthly passes. One study estimates the average savings of commuting by transit instead of by car at over \$11,000 per year in the metropolitan Chicago area.<sup>3</sup>

Lower-income households, particularly those without access to cars (either because they do not own a car, cannot afford fuel prices, or other reasons), depend heavily on public transit, and it often provides their only link to jobs, health care, education, or other important assets. The same is true of disabled or elderly residents without the ability to drive. This is both an equity and economic consideration; the inability to travel has negative impacts on individuals, but also prevents them from participating fully in the region's economy.

#### **Environmental**

Transit creates environmental benefits by reducing emissions of pollutants and greenhouse gases, reducing oil and gasoline consumption, and shifting some petroleum usage to electricity. Transportation is one of the largest single sources of greenhouse gas emissions, and shifting from automobile to transit is often the action that a household can take to most dramatically reduce their greenhouse gas emissions. Public transportation uses about half as much fuel per passenger mile as private vehicles, and in addition to fuel savings accrued from shifting drivers to transit, there would be savings due to reduced congestion for those continuing to drive.

#### **Quality of Life**

Public transit can also have many positive impacts on nearby communities. Transit increases the value of nearby land, helping to support TOD or reinvestment projects. Particularly around rail stations, a number of economic studies have shown that land values nearby are higher than in comparable areas that are not near transit. It also supports non-motorized transportation systems, as most transit trips begin or end with walking or biking, and improved walking and biking systems are linked with positive health outcomes. Transit is a central component of livable communities, one of the main themes of GO TO 2040.

Figure 60. Costs of commuting, car vs. transit

\$12,500

ANNUAL AVERAGE COST OF CAR COMMUTING

\$1,000

ANNUAL AVERAGE COST OF TRANSIT COMMUTING

Source: American Public Transportation Association

- 1 Chicago Metropolis 2020, "Time is Money: The Economic Benefits of Transit Investment." 2007.
- 2 More discussion of the economic benefits of reducing congestion can be found in the GO TO 2040 section "Invest Strategically in Transportation."
- 3 American Public Transportation Association, "Riding Public Transit Saves Individuals \$9,242 Annually," media advisory, January 12, 2010. See <a href="http://tinyurl.com/yznlg5a">http://tinyurl.com/yznlg5a</a>.
- 4 Todd Davis and Monica Hale, "Transportation's Contribution to U.S. Greenhouse Gas Reduction." 2007.
- 5 Robert J. Shapiro, Kevin A. Hassett, and Frank S. Arnold, "Conserving Energy and Preserving the Environment: The Role of Public Transportation," American Public Transportation Association, 2002.
- 6 Daniel P. McMillen and John McDonald, "Reaction of House Prices to a New Rapid Transit Line: Chicago's Midway Line, 1983-1999," <u>Real Estate Economics</u>, 32 (3; 2004): 463-486. John F. McDonald and Clifford I. Ousji, "The effect of anticipated transportation improvement on residential land values," <u>Regional Science and Urban Economics</u>, 25 (1995): 261-278. David R. Bowes and Keith R. Ihlanfeldt, "Identifying the Impacts of Rail Transit Stations on Residential Property Values," <u>Journal of Urban Economics</u> 50 (2001): 1-25. Robert Cervero and Michael Duncan, "Transit's Value-Added Effects: Light and Commuter Rail Services and Commercial Land Values," <u>Transportation Research Record</u> 1805 (2002): 8-15.

### 11.2 Current Conditions

The metropolitan Chicago region has one of the nation's oldest and most extensive public transportation systems. Service is provided by three operating agencies — CTA rapid transit and bus, Metra commuter rail, and Pace suburban bus and Americans with Disabilities Act (ADA) paratransit — under the umbrella of the RTA. Each has specific authorities and responsibilities:

The CTA offers bus and heavy rail service within Chicago and 40 nearby communities. The CTA system is the second largest public transportation system in the country and provides 1.6 million rides on an average weekday.

Metra provides commuter rail service throughout the region. Operating from four downtown Chicago transit stations, Metra serves 240 stations throughout the region and averages over 300,000 rides per weekday.

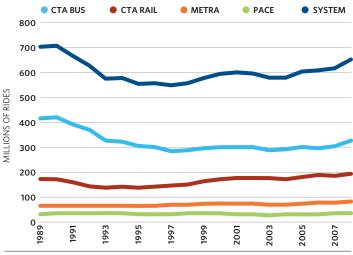
Pace offers bus service in the suburban parts of the region, as well as providing vanpool and ride matching (carpooling) information for the entire region. Pace also is responsible for demand-responsive paratransit service (vehicles dispatched on request) throughout the region including Chicago, including service required by the ADA. Pace's bus service averages around 100,000 rides per weekday, with an additional 10,000 riders per day using paratransit.

The three service providers are governed by the RTA whose primary mission is to manage the financial aspects of the transit system and to facilitate coordination among the service providers. While CTA, Pace, and Metra are each responsible for setting their levels of service, fares, and operational policies, the RTA provides oversight of these decisions, particularly budgeting issues. Additionally, the RTA is responsible for decisions requiring a regional perspective, including coordination of transportation services across the three agencies. In 2008 the State Legislature required the RTA to make permanent its strategic planning process and to use the strategic plan to guide and evaluate service board programs and projects.

Together, this system provides two million rides on an average weekday, accounting for nearly nine percent of all weekday trips and over 13 percent of commute trips. (Please note that Kendall County is in the CMAP region but not in the RTA service area.) There are other transit providers beyond these agencies — including counties, municipalities, townships, and private providers — but the vast majority of service is provided by the CTA, Metra, and Pace.

Use of the transit system has not kept pace with the region's growth. Overall ridership is lower than it was 20 years ago, though it has rebounded substantially from a low point in the mid-1990s (see **Figure 61**). Meanwhile, the region's population and employment have grown and become more dispersed, often in development patterns that were designed solely for the automobile and are therefore difficult to serve with transit. As a result of these growth patterns, reverse commute trips (residents of urban areas commuting to jobs in suburban areas) or intersuburban commute trips (between different suburbs) make up an ever-increasing share of transit trips but are more difficult to serve than the traditional commute.

Figure 61. Transit ridership, 1989-2008



Source: Regional Transportation Asset Management System

<sup>7</sup> These statistics are based on CMAP's transportation modeling and may differ slightly from observed data.

#### **Funding**

Transit expenditures are often divided into two types, though the lines can be blurry; operating funds are those used to run the system, including staffing, fuel costs, and other ongoing costs, and capital funds are those used to purchase vehicles as well as for major maintenance, improvement, or expansion projects.

Each year, more than \$2 billion is spent to operate the transit system. Approximately half of this is made up from fares collected from riders and other system-generated revenues (from advertising, concessions, etc.), termed "farebox recovery." This is supplemented by a portion of the RTA sales tax collected in the region, applied at the rate of one and one quarter percent in Cook County and one-half percent in the collar counties, and a real estate transfer tax applied only within Chicago. The majority of this funding is then allocated based on geography, with funds collected in Chicago, suburban Cook County, and the collar counties being distributed to the service boards at varying rates. The state matches the sales tax collected in the RTA's six-county region and the real estate transfer tax applied in the City of Chicago. The state also makes other contributions.

Transit capital funds primarily come from state and federal sources. While federal capital funding has been fairly consistent, state transit capital funding can vary significantly from year to year. In addition to capital improvements, capital funds are also used for the purchase of buses and rail cars, which typically makes up a significant portion of the capital expense in any given year. A significant capital funding source is the federal New Starts program, but this is restricted only to capital expansions.

The RTA's 2007 Moving Beyond Congestion initiative highlighted the transit system's considerable capital and operating funding needs, caused by years of underinvestment. This initiative resulted in new operating funding from increases in the sales tax and Chicago's Real Estate Transfer Tax. This averted the immediate operating funding crisis but did not fully solve the problem of sustainable funding, especially for the backlog of capital maintenance needs. It also did not halt the cost increases that have bedeviled the transit system. Over the past decade, transit operating costs have risen at an average rate of 4.5 percent per year, considerably above the rate of inflation. Cost increases have generally been due to elements outside the direct control of the operators of the transit system, including material and fuel price inflation, liability claims, rising demand for federally-mandated ADA paratransit services, and costs of health insurance and pension obligations. These problems are not unique to this region, as transit agencies in many other U.S. metropolitan areas face similarly increasing costs. Addressing these issues while still maintaining good service levels and affordable fares is a difficult challenge, but one which the region's transit agencies will need to face; GO TO 2040 supports the RTA and the service boards as they address these difficult issues.

Currently, tax revenues across the nation have fallen significantly due to the ongoing recession, while costs continue to rise. Severe service cuts were put in place in 2010 by the CTA and Pace to address this new reality. In this environment, even maintaining the current transit system — let alone expanding it to meet demands for service in underserved areas — is a critical challenge.



### 11.3 Indicators and Targets

CMAP proposes to measure the region's success in improving the transit system using two indicators: transit ridership and transit access.

Transit ridership is defined as the number of trips served by transit on an average weekday. Transit access is defined as the number of people who live and work within walking distance of transit. Together, these two indicators measure both the effectiveness and the coverage of the region's transit system.

#### **Transit Ridership**

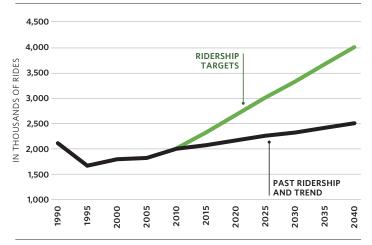
Ridership is a standard measure of the use of a transit system. Currently, weekday ridership on the region's transit system is approximately two million (ridership on weekends is considerably lower). This is approximately nine percent of trips made each weekday. By 2040, the region should increase transit ridership's share to 13.5 percent of trips made each weekday — or approximately four million trips (see **Figure 62**).

transit ridership per weekday

2.3 million by 2015

4.0 million by 2040

Figure 62. Transit ridership targets, 1990-2040



Sources: Regional Transportation Asset Management System, Chicago Metropolitan Agency for Planning analysis, 2010

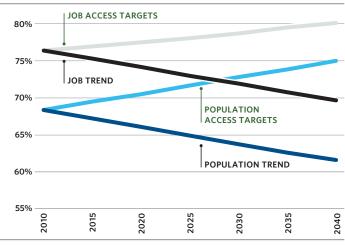
#### **Transit Access**

Another measure of the region's transit system is the number of people who live and work within walking distance of fixed-route transit, defined as a quarter mile from a fixed-route transit stop or station. While this does not account for the quality of the transit service or the presence of vanpools or other non-fixed-route services, and also does not measure those who drive to transit stations, it does provide a simple measure of transit accessibility. Currently, 5.9 million people (68 percent of the region's population) live within walking distance of transit, and 3.2 million people work in these areas (or 76 percent of total jobs). By 2040, the region should increase the number who live within walking distance of transit to 8.25 million people (or 75 percent of the region's 11 million people in 2040) and the number who work there to 4.3 million people (or 80 percent of jobs in 2040). This can be accomplished by encouraging development in areas with transit service, and also by expanding the transit network through new bus service to cover additional parts of the region (see Figure 63).

POPULATION AND JOBS WITH ACCESS TO TRANSIT

69% of residents and 77% of jobs by 201575% of residents and 80% of jobs by 2040

Figure 63. Transit access targets, 2010-2040



Source: Chicago Metropolitan Agency for Planning analysis, 2010

### 11.4 Recommendations

Dramatic improvements to the region's transit infrastructure and operations are needed to create a truly world-class system. These improvements are broken into two categories: maintaining and modernizing the system; and pursuing major expansion projects, including high-speed rail.

This section also makes recommendations for financing, identifying new sources of revenue to support transit and also calling for the region's transit agencies to directly address rising costs; this will be needed for any of the recommended improvements to the transit system to occur. Finally, recommendations for supportive land use, infrastructure improvements, and other local support, all of which are essential to the success of transit but usually beyond the direct control of the transit agencies, are discussed.

#### Maintaining and Modernizing

A top priority of GO TO 2040 is to maintain and operate the existing transportation system, and transit is no exception. The region's transit infrastructure represents a \$36 billion investment, <sup>8</sup> and protecting this investment is a high priority. The goal is to move the system toward a "state of good repair," the point at which all transit facilities are in good condition and there is no backlog of capital maintenance. For many years, the region has been moving in the wrong direction in relation to this goal; due to underinvestment in maintenance and implacably rising operation costs, funds that should have been used for capital investment have instead been diverted to keep the system operating. A state of good repair for all facilities may not be reached within the plan's horizon, but it is an ongoing goal that should be strived for.

Improving the condition of transit infrastructure is important, not only because it saves more costly repairs in future years, but because it improves transit operations. A better maintained system would reduce equipment breakdowns and remove "slow zones" (areas where conditions necessitate slower operating speeds than desired), allowing services to more closely adhere to their schedules and making more frequent service possible. Even beyond its practical benefits, a well-maintained system also projects a more positive image of the quality of service, making transit more appealing to potential users.

Maintenance can also serve as an opportunity to modernize, improve, and enhance the transit system at the same time. For example, rather than simply replacing buses or rail cars at the end of their useful lives with identical vehicles, transit agencies should continue to upgrade them. As another example, routine rehabilitation of stations can provide an opportunity to install real-time vehicle arrival signs or other real-time passenger information technology. If paired with maintenance activities, these improvements can be accomplished at lower cost than if they were stand-alone projects. This also applies to projects undertaken by agencies that maintain roadways, namely the Illinois Department of Transportation (IDOT), counties, and municipalities; road improvement projects can be an opportunity to improve sidewalks, bicycle facilities, and bus stop conditions as well.

Taken together, small-scale improvements can be very effective at improving the transit system. A variety of technological improvements, including real-time traveler information, transit signal priority, use of ART and BRT, and flexible scheduling of demand-responsive service, can make transit easier to use and more efficient to operate. Many of these innovations have already been applied in the region and should continue to be expanded. While it is difficult to predict future advances in communications technology, GO TO 2040 recommends that transit agencies stay on the cutting edge of applying technological solutions to make transit work better. As discussed earlier in this section, user perception of transit is critically important, and well-designed stations with attractive and vibrant surroundings, modern vehicles, safe and convenient pedestrian access, and even the inclusion of public art in transit facilities helps to improve the image of transit. Coordination between service providers to allow seamless transfers between services is necessary. A specific improvement that would help with both user perception and experience is the integrated coordination of fares between the service boards, and the RTA should work with service providers to implement this improvement. Ultimately, fare coordination should result in a universal "smart card" that could be used for tolls, parking fees, and other transportation expenses. These improvements would make transit operate more smoothly and attract riders, but do not replace the basic need to have an adequate supply of service. Increases in frequency on existing bus services, or reduction of "bus bunching" on bus routes that experience this problem, would provide a higher quality of service and also help increase ridership.

Bus service should be expanded into underserved areas with high transit potential and where it is complemented by land use planning and local infrastructure investment that supports transit. Several factors make expansion of transit in suburban areas important. including demographic changes, the rise in demand for reverse commute and intersuburban trips, and growing support for transit in the suburbs.9 Many suburban areas have densities that are high enough to support transit, either for all-day bus service or for shuttle services that focus specifically on connecting residents or workers to train stations or other destinations. When conventional, fixedroute bus service is not feasible in low-density areas, other transit options such as vanpools, employer-sponsored shuttles, or demandresponsive services may be, GO TO 2040 supports implementing improvements that address the need for better suburban transit, such as more frequent reverse commute rail service, improved or new fixed-route bus services, and innovative transit service options.

Of particular importance to making transit work in suburban areas is solving the "last mile" problem, or the challenge of connecting transit passengers to their ultimate destination, which is often not directly adjacent to the transit facility; this can be accomplished through local shuttle or circulator services, improved walkability, car-sharing programs, or land use planning that allows higher densities near transit facilities. To make any new service as attractive to potential riders as possible, the technological improvements described above should be incorporated and high-quality stations, appropriate vehicles, and supportive local infrastructure should all be included. In many cases, bus service can test the market for transit, helping to determine whether a major capital investment in infrastructure is justified.

Another important element of public transit is the region's paratransit system. The cost of providing paratransit is steep, and will only get more so as the senior population continues to grow. GO TO 2040 recommends attracting as many paratransit users as possible to the fixed-route system, by way of the service increases and improvements to user perception described above. Many paratransit riders avoid fixed-route service because of concerns about their personal safety while traveling, the difficulty of making transfers, or a lack of safe and accessible sidewalks and bus stops. The general transit improvements described elsewhere in this section will help to alleviate these concerns. Beyond this, it is clear that improving service beyond the basic requirements of the ADA will require contributions from local governments, nonprofits, or private groups (such as senior housing developments) in the areas covered. The costs of paratransit service have been increasing rapidly due to high demand, and this is expected to increase with the aging of the population; even continuing to provide ADAmandated service at a high level will require innovative approaches to this issue.

#### **Expansion**

Maintenance and modernization is a high priority, but some expansion of the system is also needed to match changing patterns of where people live and work. In general, CMAP supports expansions of the region's bus system, provided that these new projects are carefully prioritized and supported by local land use and infrastructure. In contrast, only a limited number of major capital expansions (such as new or extended rail lines) are recommended.

GO TO 2040, as the formal long-range transportation plan for the region, takes a special approach to major capital expansion, in compliance with federal guidelines in its treatment of major transportation capital projects. Essentially, the plan must include a list of major capital projects that can be pursued with available or reasonably expected funding, termed "fiscal constraint." 10

While major transit expansion projects generate a great deal of attention and interest, they are generally not the most effective or efficient ways to make improvements to the region's transit system. Maintenance, modernization, and strategic improvements are more effective, as they capitalize on existing infrastructure. But GO TO 2040 does recommend a limited number of major projects for implementation: the West Loop Transportation Center, CTA Red Line South extension, CTA north Red and Purple Line improvements, and improvements to the Metra UP-W, UP-NW (including a short extension), UP-N, SouthWest Service, and Rock Island rail lines. It also recommends pursuit of managed lanes or multimodal corridors on I-90 and I-55. These may ultimately feature full BRT service, with high-quality stations, extensive park-andrides and transfer options, and features that give buses priority, but express bus service should be initiated in the interim as these full BRT systems are being planned. A multimodal corridor is also recommended for consideration on I-290, but the mode has not yet been determined.

The major capital projects contain few extensions or new service; instead, they typically improve and expand the capacity of existing infrastructure. The CTA north Red and Purple Line and Metra UP-W, UP-N, SouthWest Service, and Rock Island projects all improve existing rail lines, building on our existing capital investment; the Metra UP-NW project includes a short extension but is primarily an improvement project as well. The CTA Red Line South extension is the only significant extension project on the fiscally constrained project list. It extends service by providing an important new transit link for residents of a primarily low-income area, and studies have shown that the project will generate considerable ridership.

Finally, the West Loop Transportation Center is necessary for Chicago to become, as intended, the hub of a Midwest high-speed rail network, as it improves connections between proposed high-speed rail (and current interregional rail), Metra, and CTA. This project creates a multimodal transportation center in the West Loop, with direct pedestrian connections between Union and Ogilvie Stations and a new CTA rail branch. Beyond supporting high-speed rail, it is expected to provide significant immediate benefits to the many Metra lines terminating at Union Station, improves connections between Union and Ogilvie Stations, and eases transfers between Metra and CTA.

There are 24 major capital projects which were proposed but which are not on the constrained project list. Several of these exhibited significant benefits but are early in the project development process and require further study, or will need innovative financing to be feasible.<sup>11</sup>

The plan also supports interregional high-speed rail, which is planned to provide connections to other Midwestern metropolitan areas. It is important for high-speed rail investments not to be viewed as a replacement for investments in the region's transit system. Continued pursuit of new high-speed rail service is recommended, but new revenue should be found for this investment, rather than diverting the region's scarce transportation resources for this purpose. Local transit connections and supportive land use planning around proposed stations — including the West Loop Transportation Center, as well as any additional stations located at airports or in suburban areas — would strengthen high-speed rail and should be pursued. GO TO 2040 also supports the continuation of traditional inter-city rail service such as that currently provided by Amtrak.

<sup>10</sup> For more information, see the GO TO 2040 section "Invest Strategically in Transportation."

<sup>11</sup> For more detailed information and analysis, see the GO TO 2040 capital project page at <a href="http://www.goto2040.org/scenarios/capital/main/">http://www.goto2040.org/scenarios/capital/main/</a>.

#### **Finance**

Few or none of the improvements described above are possible within the current financial environment. Financial analysis of expected transportation revenues and costs through 2040 has shown that existing revenue sources are barely sufficient to maintain our transportation system, even assuming that future increases in cost are quite modest. To solve the financial problems of the transit system, cost increases must be kept in check, and additional revenue sources must be found.

Both of these efforts should be the primary focus of the RTA, which is responsible for the financial oversight of the system. GO TO 2040 recommends a strong, central role for the RTA in understanding and solving the financial challenges facing the system. This will necessitate working closely with the transit service boards to address cost increases — many of which occur for reasons outside the control of the region's transit agencies — while exploring a variety of sources to provide increased funding for transit. As a starting point, these should include the state meeting its transit funding obligations.

GO TO 2040 recommends an increase in the state gas tax, with a portion of these proceeds devoted to transit. It also recommends the implementation of congestion pricing on selected expressways in the region and the use of a portion of these new revenues to fund nearby transit options once the operating and maintenance needs of the priced facility have been met. Further options include the pricing of parking, using public-private partnership (PPPs), or other innovative sources, and these should continue to be investigated. In the past, the transit system has relied on occasional state capital bills to meet its needs, but these have been infrequent and unpredictable and have sometimes been earmarked, instead of funding the most beneficial projects. Instead, transit (and transportation overall) should be adequately funded on a regular basis, which would remove the need to have periodic capital infusions. Finally, CMAP recommends reforms in federal funding programs that currently favor new service startups instead of maintenance (specifically, the New Starts program). Federal Transit Administration (FTA) rules concerning use of federal funds for engineering of transit projects are stricter than those used by the Federal Highway Administration (FHWA) for roadway projects and should be changed to allow regions to more easily pursue transit improvements.

Rough estimates of costs for the improvements described above are contained in the subsection 11.6, "Costs and Financing."

# Supportive Land Use, Infrastructure Investments, and Other Local Support

For transit to be successful, it requires supportive land use planning and infrastructure investments. A new transit service in an area that is low density and not walkable is unlikely to succeed. Therefore, transit expansion efforts should be accompanied by land use planning, local infrastructure investments, and other local actions that seek to create a transit-friendly environment, and transit investments should be prioritized in places where such planning is occurring. As previously noted, a significant challenge in providing transit service in much of the region involves the "last mile" problem; local support for transit is necessary to overcome this.

The principles that make up livable communities<sup>13</sup> cover many of the elements that make up transit-supportive land use. Some elements are particularly important, such as development density. Rules of thumb among transit researchers are that six to eight housing units per acre (or 25 employees per acre)14 are needed to support basic bus service, and more than twice this density is needed for more frequent bus or rail service, though this can vary. Provision of affordable housing in areas served by transit is also particularly important, because transit is often the only travel option for lowerincome residents. 15 Beyond land use and housing, local governments can help transit to be effective by educating residents through municipal newsletters, websites, or other means; organizing transit travel trainings (particularly for elderly and disabled residents); supporting the expansion of car-sharing programs into their communities and participating in car-sharing programs; and overall working in partnership with transit agencies to find creative ways to attract their residents to transit.

One important precondition for successful transit service is an extensive pedestrian and bicycle infrastructure that makes direct connections from transit stops to nearby destinations. This goes beyond sidewalks and bicycle facilities to include roadway design, pedestrian treatments at signalized road crossings, safety islands, or other improvements that provide safe ways to cross busy streets. Other infrastructure improvements can be made locally to support transit, such as bicycle racks at train stations and bus stops, attractive bus shelters, and improvements that allow accessibility by disabled people. Typically, these improvements fall under the jurisdiction of municipalities or counties, and an active local role is needed to create a supportive pedestrian and bicycle environment.

<sup>12</sup> See the GO TO 2040 section "Invest Strategically in Transportation."

<sup>13</sup> Described in the GO TO 2040 chapter "Challenges and Opportunities."

<sup>14</sup> Victoria Transportation Policy Institute. Transportation Demand Management Encyclopedia. http://www.vtpi.org/tdm/tdm45.htm.

<sup>15</sup> Additional discussion and recommendations are in the GO TO 2040 section "Achieve Greater Livability through Land Use and Housing."

Parking deserves particular attention in this discussion because of its complex relationship with transit. Free and easily available parking is the norm in most parts of the region, even though the construction and maintenance of a parking space is far from free. In other words, free parking is actually subsidized by the local governments or businesses that provide it. It also creates a disincentive to use transit; ridership is typically highest when traveling to destinations where parking is expensive or scarce. One important transit-supportive action that local governments can take is to review parking regulations and pricing levels to examine what kinds of travel behavior they incentivize. On the other hand, parking can also help provide access to transit. While the GO TO 2040 plan supports dense development around train stations (conventional TOD), many of the region's Metra stations that attract the most riders have significant commuter parking. CMAP recommends a mixture of stations that focus on TOD and stations that provide commuter parking options, though the overall intent should be to transition stations to TOD where possible.

Despite the importance of local planning to support transit, most municipal comprehensive plans do not include detailed recommendations on the topic. Nearly every community in the region — even those without train stations — includes areas that could support some type of transit service. Most of these communities also support the improvement or expansion of transit within their community, recognizing its value to their residents. Current land use decisions affect the future viability of transit for years to come, so planning proactively is needed. GO TO 2040 recommends that local governments interested in attracting transit should plan for supportive land use, housing, and infrastructure improvements to support it, and that the region's transit agencies should consider the degree of supportive local planning when making investment decisions.

These planning activities should be supported by funding and financial incentives for local governments who plan for land use that supports transit. GO TO 2040 recommends creating a streamlined and coordinated technical assistance and funding program to support local planning and ordinance updates, with funding from CMAP (from Unified Work Program [UWP] funds), RTA, and IDOT. The program should fund planning efforts that link transportation, land use, housing, and economic development. This program should cover both planning and ordinance changes, with a focus on implementation. For example, many plans recommend changes to zoning ordinances or parking regulations; this program should provide funding or technical assistance to accomplish these regulatory changes.

Federal programs may also provide new funding sources for planning and implementation. One new federal program, the Sustainable Communities Initiative, appears to provide initial steps in this direction, and the federal government should commit sufficient funds to this or similar programs to support plan development and implementation. Opportunities for tying implementation funds to planning can even be pursued without new funding sources. Recognizing the interplay between infrastructure investments and land use, the region should use transportation funding strategically to support projects that help to implement GO TO 2040. Two examples from other regions, the Atlanta Regional Commission's Livable Communities Initiative (LCI) and the San Francisco Bay Area Metropolitan Transportation Commission's Transportation for Livable Communities (TLC) program, use a combination of state and federal funds for this purpose, and a similar program should be created in this region.<sup>16</sup>

### 11.5 Implementation Action Areas

The following tables are a guide to specific actions that need to be taken to implement GO TO 2040. The plan focuses on four implementation areas for increasing commitment to public transit:

Improve the Fiscal Health of Transit

Modernize the Region's Transit System

Pursue High-Priority Projects

Conduct Supportive Land Use Planning

#### Implementation Action Area #1: Improve the Fiscal Health of Transit

Strengthen RTA efforts on financial oversight  LEAD IMPLEMENTERS: RTA, CTA, Metra, Pace	The RTA is charged with the financial oversight of the transit system.  The recent funding crisis has highlighted the importance of this responsibility.  In collaboration with the service boards, the RTA should focus its efforts on addressing the system's fiscal health, including increasing efficiencies and limiting cost increases moving forward.
Direct a portion of congestion/parking pricing revenues to transit  LEAD IMPLEMENTERS: State (IDOT, Tollway), RTA, counties, municipalities	Congestion pricing and parking pricing are recommended within GO TO 2040.  The revenues from these sources should be used in part for supportive transit service.  For example, revenues from congestion pricing should be used to support increased transit service in the same corridor as the priced facility, or to improve connections to service in the corridor.
Use other innovative funding sources  LEAD IMPLEMENTERS: State (IDOT, Tollway), CMAP, RTA, CTA, Metra, Pace, counties, municipalities	The reliance of the transit system on sales tax has contributed to its current funding crisis. CMAP, in conjunction with potential funding partners, should investigate innovative financing such as value capture, or increasing the state gas tax and allocating a portion of the receipts to transit, in addition to the pricing strategies described above.
Revise the federal "New Starts" program for transit  LEAD IMPLEMENTERS: Federal (U.S. DOT)	The Federal New Starts program is a competitive grant process that funds transit system expansions. While expansions are vital for many parts of the U.S., older and more well-developed systems should have the option to use these funds for badly needed maintenance and modernization efforts. The current New Starts program creates a strong incentive to pursue expansions, when maintenance and modernization should be the region's top priority. The criteria for federal New Starts grants should be expanded to support reinvestment in existing infrastructure rather than solely new expansions. Further, FTA regulations concerning use of funds for engineering of transit projects are stricter than those governing highway projects, and should be changed to create a "level playing field."

#### $Implementation\,Action\,Area\,\#2:\,Modernize\,the\,Region's\,Transit\,System$

Focus investments on maintenance and modernization  LEAD IMPLEMENTERS:  RTA, CTA, Metra, Pace	Continue to make the maintenance of the system at a safe and adequate level the top priority when making investment decisions. The transit service boards should also pursue opportunities to modernize and upgrade the system as part of routine maintenance to bring the system to a world-class level.
Adopt best practices in new technologies  LEAD IMPLEMENTERS: State (IDOT), RTA, CTA, Metra, Pace, counties, municipalities	Use technological improvements to make the system more efficient. The use of transit signal priority systems, ART concepts, and traffic signal coordination in general are supported, particularly when integrated multimodally to form "smart corridors." Advanced scheduling and operations practices should also be used to improve the efficiency of demand-responsive services. Coordination with agencies that maintain roadways — namely, IDOT, counties, and municipalities — will be necessary to achieve some of these improvements.
Widely implement traveler information systems  LEAD IMPLEMENTERS:  RTA, CTA, Metra, Pace	Pursue the widespread implementation of traveler information systems, which can give real-time arrival information, assist in trip planning, inform commuters about parking availability, and serve other purposes. These can include signs at stations, websites and social media, station announcements, and other technologies.
Consider user perception in vehicle purchases, and station design  LEAD IMPLEMENTERS:  RTA, CTA, Metra, Pace	Invest in improvements that make transit more attractive to potential users. State-of-the-art vehicles, clean and attractive stations, safe and convenient pedestrian access, inclusion of public art or other aesthetic features, and the overall appearance of transit has an impact on its use.
Establish seamless coordination between modes  LEAD IMPLEMENTERS: RTA, CTA, Metra, Pace, counties, municipalities	Coordinate services and fares between the service boards, including pursuit of a universal fare payment system. Also, coordination with bicycle and pedestrian facilities and car-sharing services, which are often used by transit riders, can link transit seamlessly with other modes.

#### Implementation Action Area #3: Pursue High-Priority Projects

Prioritize among potential bus service increases, extensions, and new service using regionally consistent criteria  LEAD IMPLEMENTERS: RTA, CTA, Metra, Pace	Pursue bus expansion projects in areas where they are most likely to succeed.  Expansions should be prioritized in part based on supportive local land use planning and infrastructure investment. The recommendations made above concerning technology and user perception apply here as well. Potential transit markets should be tested with bus-based concepts such as ART or BRT before investing in rail infrastructure.
Include transit components as part of major highway capital projects  LEAD IMPLEMENTERS: State (IDOT, Tollway), RTA, CDOT, CTA, Metra, Pace	Include planning for transit (in most cases BRT, but also rail in some cases) within highway projects recommended in the plan, including the Elgin-O'Hare projects, I-55 managed lane, I-90 managed lane, Central Lake County corridor, and the I-290 multimodal corridor.
Implement high-priority transit projects LEAD IMPLEMENTERS: RTA, CDOT, CTA, Metra, Pace	Advance recommended projects through the federal New Starts program or other discretionary funding programs. Highest priority projects for immediate action include the Red Line South extension, West Loop Transportation Center, and improvements to the north Red/Purple Lines, Union Pacific (N, NW, and W), Rock Island line, SouthWest Service, and possibly the I-290 multimodal corridor.
Conduct detailed studies of prioritized corridors, and continually develop and evaluate major projects  LEAD IMPLEMENTERS: RTA, CDOT, CTA, Metra, Pace	Conduct feasibility studies for projects that showed high potential but are not fully understood, and pursue innovative financing for beneficial unconstrained projects. Identify potential major capital projects through corridor studies, county or COG transportation plans, or other regional efforts. Evaluate and consider these projects during regular updates to the plan.
Improve evaluation measures and decision-making processes  LEAD IMPLEMENTERS: CMAP, RTA, CTA, Metra, Pace	In light of limited funding, it is critically important to be able to evaluate projects against a variety of evaluation measures to make the best long-term decisions. CMAP should work with the RTA to develop improved transportation models that effectively measure the benefits of a variety of types of transit projects.
Increase federal investment in high-speed rail  LEAD IMPLEMENTERS: Federal (U.S. DOT, Congress)	The initial round of funding for high-speed rail assisted with necessary improvements, but considerably more is needed to actually implement a functioning system.  A continued federal commitment is necessary for this. The region's Congressional representatives should make this a high priority, as should U.S. Department of Transportation (U.S. DOT) staff. However, federal funding for high-speed rail should not come at the expense of funding for regional public transit improvements.
Link high-speed rail with regional transit and land use planning  LEAD IMPLEMENTERS:  RTA, CDOT, CTA, Metra, Pace, counties, municipalities	Advance the West Loop Transportation Center, which improves the connections between Metra and the CTA, as well as proposed high-speed rail service, and plan for supportive nearby land use. Plan for direct and convenient links between high-speed rail, Metra, and CTA in this location. Also, identify additional station locations within the region and plan for supporting transit services and land use.

#### Implementation Action Area #4: Conduct Supportive Land Use Planning

# Align funding for planning and ordinance updates

LEAD IMPLEMENTERS:
State (IDOT, DCEO, IHDA), RTA, CMAP, counties, municipalities, philanthropic

CMAP, IDOT, and RTA should coordinate funding programs to fund local plans and ordinance updates. Use funds to create a new streamlined grant program for transportation, land use, and housing which assists local governments to create plans or ordinance updates that are consistent with GO TO 2040. This program should be able to fund ordinance changes, updates to local government programs or policies, or similar activities, as well as plan preparation. Supplement these funding sources with philanthropic or other public and private sources as appropriate. In particular, funding from housing and economic development sources should also be included within this streamlined program.

# Identify and exploit additional opportunities for transit oriented development

LEAD IMPLEMENTERS:
CMAP, RTA, CTA, Metra, Pace, counties,
municipalities, nonprofits

Many communities have embraced TOD as a strategy to revitalize their downtowns, and plans for many of the most obvious locations for TOD have already been prepared. CMAP and regional civic organizations should identify other potential opportunities for application of TOD strategies and initiate pilot projects in areas where TOD is more difficult (i.e., locations with difficult land assembly, bus-based TOD, etc). Opportunities for the application of TOD principles around planned ART services can be an immediate focus.

### Use livability principles to plan for land use in development near transit

LEAD IMPLEMENTERS:
Counties, municipalities

Counties and municipalities should pursue opportunities for more dense development which mixes uses and housing types within "location efficient" areas near transit services. Counties and municipalities can increase density by providing density bonuses (in exchange for affordable units), creating transit overlay districts, or using form-based codes to address community fit. This can occur both for existing transit services and areas where transit expansion is planned, and applies to both rail and bus service.

# Plan for land use specifically around major transit capital projects

LEAD IMPLEMENTERS:
CMAP, RTA, CTA, Metra, counties,
municipalities

Prepare land use plans around stations of the CTA Red Line South extension, West Loop Transportation Center, and improvements to the CTA north Red and Purple Lines and Metra improvements to Union Pacific (N, NW, and W), Rock Island line, SouthWest Service, and possibly the I-290 multimodal corridor.

### Plan for land use specifically around BRT projects

LEAD IMPLEMENTERS: CMAP, RTA, CTA, Pace, counties, municipalities Study the best way to conduct land use planning to support BRT services which may be part of the Elgin-O'Hare projects, I-290 multimodal corridor, I-55 managed lane, I-90 managed lane, and the Central Lake County corridor. There are not good regional examples of how land use planning around expressway-based BRTs could occur, and a framework for this is needed.

#### Promote housing affordability near transit

LEAD IMPLEMENTERS: Counties and municipalities

Proximity to transit services often increases land value, making it more difficult to provide a range of housing. Counties and municipalities should analyze housing needs near transit services, and can provide a variety of incentives to developers to bring down development costs in exchange for affordable units. These tools include land donations, density bonuses, permit fee waivers, land trusts and expedited permitting processes. These should be explored, considered, and adapted to specific local situations.

### Require supportive land use planning before new transit investment is made

LEAD IMPLEMENTERS: RTA, CTA, Metra, Pace

Consider supportive land use when making investment and programming decisions. The service boards should prioritize investments (new service in particular) in areas that have or are planning for land use and local infrastructure that supports transit.

### Update guidelines for transit-supportive land use

LEAD IMPLEMENTERS: RTA, CTA, Metra, Pace

Update materials produced by the transit service boards concerning land use planning and small-scale infrastructure investments that support transit. These materials should include additional topics such as housing affordability that go beyond the density and design issues which are currently included.

### 11.6 Costs and Financing

A detailed transportation financial plan has been prepared as part of GO TO 2040 and is available in the Appendices. The following summarizes elements of the transportation financial plan that relate to public transit.

Within this section, the terms "fiscally constrained" and "fiscally unconstrained" are used. All figures in this section are in year of expenditure dollars (YOE\$), meaning that inflation has already been added.

The transportation financial plan concluded that \$385 billion was expected to be available in transportation revenues within the GO TO 2040 plan's time horizon. Projects or recommendations that are "fiscally constrained" are those that can be funded within this \$385 billion figure. Projects or recommendations that are "fiscally unconstrained" may be desirable and beneficial but would require additional revenue. The recommendations for public transit improvements include both types. In other words, some but not all of the transit recommendations can be funded within expected revenues; others will require new sources of revenue to be identified.

This recommendation area calls for the region to invest in maintaining and modernizing the transit system; making strategic improvements and enhancements; and pursuing a limited number of major expansion projects. High-level cost estimates for these activities follow.

#### **Cost Categories**

Maintaining and modernizing the existing system is a top priority of GO TO 2040. The maintenance of the system at a level that is safe and adequate — a fundamental precondition — must be funded in full before any other improvements are made, and GO TO 2040 dedicates significant funding for this purpose. The cost of basic system maintenance and operations is estimated at approximately \$150 billion, and this is fully funded within the plan.

Beyond basic maintenance, the modernization, enhancement, and improvement of the system are high priorities. Of the recommended project types described above in this category — including signal

coordination or interconnects, passenger information systems, other technological improvements, service frequency increases, new bus service, and others — some but not all can be funded within expected revenues. Approximately \$55 billion in needs have been identified for projects in this category, but only \$15 billion to \$25 billion in funding is currently expected to be available for them. Additional revenue or savings through cost reductions will be necessary to fund the remainder of these improvements.

Finally, a limited number of major transit expansion projects are necessary to improve the transit system. Approximately \$30 billion in new capital proposals were identified through GO TO 2040, and these were individually reviewed and prioritized. Eight projects totaling \$6 billion in new capital costs are fiscally constrained, including the Red Line South extension, West Loop Transportation Center, and improvements to the north Red/Purple Lines, Union Pacific (N, NW, and W), Rock Island line, and SouthWest Service. The remaining proposals require additional revenue to be able to pursue.

#### Additional Financing

As the previous descriptions indicate, significant new funding is necessary to make all of the proposed transit improvements. Similar shortfalls exist in other areas of the transportation system as well.<sup>17</sup>

Of particular note for transit, GO TO 2040 recommends pursuing congestion pricing in appropriate corridors and dedicating a portion of the revenues to operate transit service in the same corridors. A modest approach to congestion pricing was included within the fiscally constrained revenues; a more aggressive approach would generate more revenue, which could be used for transit purposes. The plan also recommends an increase in the state gas tax and devoting a portion of those revenues to transit as well. Another relatively unexplored option which has tremendous revenue generation potential is parking pricing, and the application of this, especially in areas where new transit service is being planned, is a recommendation of GO TO 2040. Finally, GO TO 2040 recommends further investigation of innovative financing options such as PPPs, or "value capture," which allows the transit agency to share in the property value increases that new or improved transit services create in nearby areas.

<sup>17</sup> For more thorough discussion of the overall financial condition of the transportation system, see the GO TO 2040 section titled "Invest Strategically in Transportation" and the GO TO 2040 Financial Plan for Transportation (<a href="http://cmap.illinois.gov/financial\_plan\_transportation">http://cmap.illinois.gov/financial\_plan\_transportation</a>).