









Chicago and Northeastern Illinois are built on transit and our investment is at risk.

It's time to act.

Each day, Northeastern Illinois and the City of Chicago depend on safe, reliable trains and buses to get two million riders where they need to go. Mass transit relieves highway congestion, contributes to the regional economy, and benefits society as a whole. The region's Transit Agencies – the Chicago Transit Authority (CTA), Metra Commuter Rail, Pace Suburban Bus, and the Regional Transportation Authority (RTA) – are carrying one of the largest transit-riding populations in the nation on old systems that are expensive to operate. Despite the age of their systems, the Transit Agencies work diligently every day to meet the highest expectations of safety, security, and accessibility for the public and their employees.

The 2018-2023 Regional Transit Strategic Plan, *Invest in Transit*, is the region's case for pursuing dependable funding streams that will enable the Transit Agencies to provide this vital service well into the future.

Our vision i transit as th the region's transportati network.

s public e core of robust on mobility

Transit is a central part of the region's transportation and logistics network. People use it to get to work, school, medical appointments, and more. They ride during rush hour, the middle of the day, and at night. The availability of transit throughout the six Northeastern Illinois counties of Cook, DuPage, Kane, Lake, McHenry, and Will helps our region compete on a global scale for commerce and business. Transit has a positive impact on the environment and community health by reducing congestion, improving air quality, and encouraging people to live active lifestyles. It also supplies equitable access to jobs, and provides affordable mobility for people with disabilities and those who cannot or choose not to drive. The transit system – and our investment in it – must remain competitive on all of these levels to ensure our region continues to thrive.

Invest in Transit is anchored by five policy statements that describe the Transit Agencies' shared positions on key regional issues. The statements, based on findings outlined in *Beginning the Discussion*, stakeholder input, and transit agency leadership, set a tenor for the plan and ground the vision and goals.

Over the next five years, we will...

Support a thriving, resilient region with transit systems that provide attractive, cost-effective travel options and help reduce congestion.

The Region's transit systems operated by CTA, Metra, and Pace provide an average resident with access to over 435,000 jobs in 60 minutes and up to 1.1 million jobs within 90 minutes. Transit service is essential to regional mobility and economic activity, and must be sustained into the future.

Advocate for region-wide policies and pricing strategies that support transit.

As the Transit Agencies focus on the core responsibility of operating transit services, we also recognize there is an opportunity to better leverage and fund the system by partnering across jurisdictions and transportation modes.

Continue to control costs and seek opportunities to increase dedicated revenue in order to enhance safety, improve the customer experience, prevent system deterioration, and remain competitive.

The Region's investment in transit is at risk. We operate a cost-effective transit system. However, our infrastructure is among the oldest in the country and at current spending rates, our assets are aging faster than we can replace them.

Focus limited resources on making targeted improvements and increasing transit speeds in multi-modal corridors in order to connect and strengthen communities.

Rider needs vary by geography and so will future transit solutions. In an era of limited funding, the agencies must focus some resources on transit improvements that will benefit the most people in these areas.

Adapt to the future by applying best practices to our operations, partnering with freight and roadway agencies to prioritize transit, and piloting new technology and mobility solutions.

A growing Millennial workforce and an aging Baby Boomer population are pushing the transit industry to adapt to their needs for convenience, reliability, and accessibility. We will thoughtfully adapt to ensure that robust transit service is available well into the future.



We aim to...

Deliver value on our investment

This goal focuses on the positive impacts of transit investment and the importance of increasing funding.

Build on the strengths of our network

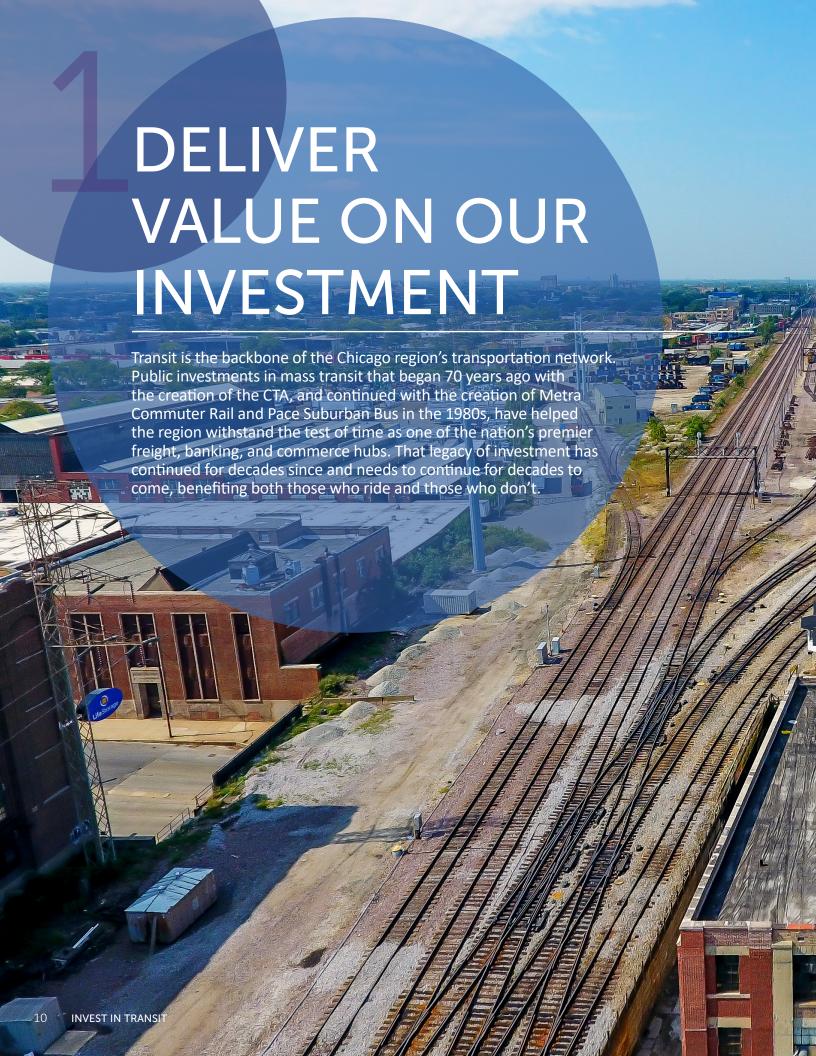
This goal focuses on the service improvements and infrastructure investments that the Transit Agencies would like to make in key transit markets throughout the region.

Stay competitive

This goal focuses on the vital role that transit plays as part of the region's mobility network and strategies for adapting to the evolving needs of riders.

The plan's three goals describe the key areas of focus for the Transit Agencies over the next five years. In the pages that follow, each of these is described in more detail with a set of projects and strategies that will help make them a reality.

Across all goals, ensuring safety, security, and accessibility are values that the Transit Agencies take very seriously. These non-negotiables are inseparable from the core responsibilities of the Transit Agencies and will be part of any strategy undertaken in achieving the goals set forth in this plan.





DELIVER VALUE ON OUR INVESTMENT

TANGIBLE BENEFITS, LASTING IMPACTS

The CTA, Metra, and Pace were created to replace what were originally private rail, streetcar, and bus companies that went bankrupt. Civic leaders at the time knew that allowing the Chicago area's transit companies to cease operations would have had disastrous consequences. So they created public agencies to inherit a sizable business, but also a sizable portfolio of aged assets, including worn track and structure, inaccessible stations, undersized garages, and old trains. Under the new agencies' leadership, private investors were replaced with government investors. The new agencies had to find a way to continue to provide efficient service while replacing the hand-me-down infrastructure through a slow and unsteady stream of public subsidies.

The agencies set to work on building new lines and replacing equipment, a forward-thinking public investment that has buoyed the region through decades of demographic and development change. The City of Chicago and suburban neighborhoods

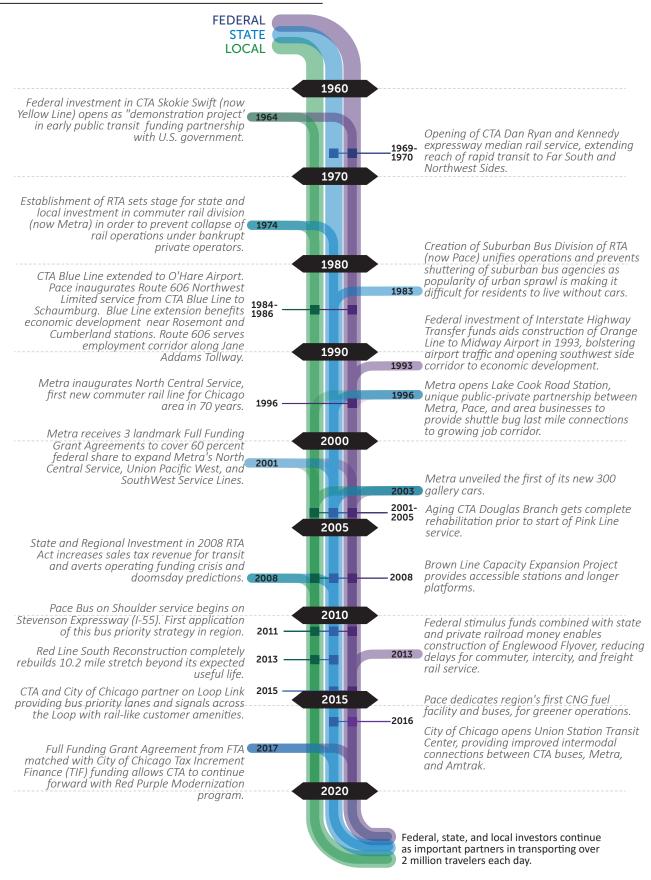
have benefited from the value that proximity to CTA and Metra transit service provides. A 2013 study prepared by the Center for Neighborhood Technology (CNT) found that properties near transit in Northeastern Illinois and across the country emerged from the Great Recession 41.6 percent more valuable than the average property in the regions evaluated.1 The Metropolitan Planning Council (MPC) conducted a similar analysis for Chicago and found that properties within two blocks of transit are more than twice as valuable as properties further away.² Metra provides congestion relief to some of the nation's most crowded expressways by accommodating hundreds of thousands of regional commuters who prefer taking the train to being stuck in traffic. Local municipalities have joined forces with Pace to meet the

Properties within two blocks of transit are more than twice as valuable as properties further away.

mobility needs of car-less and carconscious populations through a flexible family of services that include fixed routes, Call-n-Rides, and vanpools. The Transit Agencies provide transportation to many residents with disabilities through ADA Paratransit services operated by Pace and accessible fixed route services operated by Pace, CTA, and Metra. The Transit Agencies are also working to make the fixed route system more accessible.

Today, the fruits – and the responsibilities – of the region's transit operations and improvements are shared by all. Federal and state investment partners have provided capital grants for large-scale transit projects, as well as infrastructure improvements like the CREATE Program that benefits not only our transit system, but also the roadway system and national freight corridors. County and municipal investment partners have supported local station improvements to enhance transit service. Residents support transit service through every taxable purchase made in the region, to the collective benefit of riders and drivers. Transit investments have far-reaching impacts that last for generations.

Transit Investments Make a Difference



DELIVER VALUE ON OUR INVESTMENT

TRANSIT'S FINANCIAL SITUATION TODAY

The Transit Agencies are on uneven financial footing. In 2018, Transit Agencies have a \$3 billion operating budget to deliver services and a five-vear. \$4.2 billion capital budget for transit improvements. Operating funding is anchored by fares paid by riders, the RTA sales tax, and funding from the state of Illinois. While none of these sources is entirely predictable, they have been relatively consistent since the RTA Act was amended in 2008. Capital funding, however, is chronically insufficient and unpredictable.

The Transit Agencies' capital funding comes from a variety of sources including:

Federal capital grants and loan programs, that include formula grants (such as 5307/5340, 5337, 5339); discretionary grants (such as Capital Investment Grants and TIGER); and discretionary loan programs such as TIFIA (Transportation Infrastructure Finance and Innovation Act) and RRIF (Railroad Rehabilitation and Improvement Financing).

- State funds for capital, most recently provided through the state's bond programs.
- Regional funds from the Transit Agencies' bond or financing programs, farebox revenue or other Service Board revenue, and local municipalities.

STATE FUNDING IS CHRONICALLY LACKING

The absence of a State capital program since 2009 has left a sizable gap in the Transit Agency capital programs for several consecutive budget cycles. The current capital program assumes that state funding will be nonexistent for the next few years.

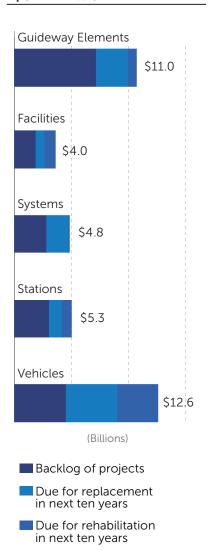
\$750M

average annual capital expenditure is far below

\$2-\$3B

annual capital need

Ten-Year Capital Investment Needs: \$37.7 Billion³



CREATIVE LOCAL FUNDING ALONE IS NOT ENOUGH

The agencies have filled some of the funding gaps with shortterm fixes and by working with local governments and agencies. Metra has dedicated a portion of the new revenue from recent fare increases to fund capital projects including rolling stock modernization and Positive Train Control (PTC).4 The CTA and City of Chicago partnered to enable the Red Purple Modernization (RPM) project to receive matching funds needed to leverage a federal core capacity grant. The local funds secured to finalize the federal partnership include \$400 million of CTA bonds backed by sales tax revenue, combined with the creation of a Transit Facility Improvement Area (TFIA) along the project corridor. Pace is partnering with the Illinois Department of Transportation (IDOT) and the Illinois Tollway to maximize expressway infrastructure for premium transit services through Bus-on-Shoulder and flex lane implementation.⁶ RTA, CTA, and Pace are also leveraging public funding through the issuance of agency bonds.

CAPITAL NEED OUTPACES FUNDING

Even with efforts to develop creative local solutions and partnerships, the magnitude of need still outpaces the available funding. The Transit Agencies face a State of Good Repair backlog of \$19.4 billion, which includes projects that could not

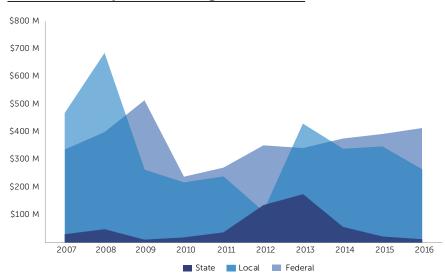
be completed on-time due to the lack of capital funding. Over the next ten years, the agencies will also need to rehabilitate assets in order to help them achieve their full potential and replace assets that are due to reach the end of their minimum useful lives. The total ten-year capital need will be \$37.7 billion and affects all types of assets ranging from guideway elements (e.g. track) to vehicles (e.g. trains and buses) as shown in the Ten-Year Capital Investment Needs chart.

Capital funding has been unpredictable over the past ten years and has varied significantly by source, as shown in the Unstable Capital Funding chart. This instability affected the Transit Agencies' ability to deliver robust capital programs, and capital expenditures during that time averaged only \$750 million per year. The Transit Agencies know

that it is not possible to address all \$37.7 billion in capital needs over the next ten years, but a capital program of \$2 to \$3 billion every year would allow the region to make significant improvements and pursue the strategies outlined in this plan.⁷

CTA, Metra, and Pace have dedicated workforces able to keep the trains and buses running efficiently while meeting the expectations of our riders. However, there is a limit to the extent that their resourcefulness and creativity can be stretched to overcome underinvestment. Many years of unpredictable and insufficient capital programs due to a lack of a consistent, dedicated funding source will eventually lead to failing equipment, operational interruptions, and system ridership losses experienced by peer legacy systems with similar funding situations. 9 10

Unstable Capital Funding8



WHAT OUR FUTURE COULD HOLD

Two possible realities lie ahead: a future with or without long-term, sustainable capital and operating funding

WITH

WITHOUT

INVESTMENT LEVEL

Stable funding allows agencies to build projects shortly after they are designed, and to take advantage of construction phasing techniques that save money.

The stop-go nature of funding means that some projects are designed and then wait in queue for delivery while prices rise and plans change.

Other projects never reach the design phase.

WHAT WE DO WITH IT

Vehicles are rehabilitated when needed and replaced on time. The system is newer overall and the agencies have funding to make customer improvements, reduce the \$19.4 billion backlog, maintain assets, and make customer enhancements.

Vehicles are kept in service longer and rebuilt or overhauled rather than replaced. The overall system is older so operating and maintenance costs rise. The percentage of our transit assets beyond their minimum useful life will grow (currently 31% of assets are in that category).

SERVICE & CUSTOMER IMPACTS

Service is reliable and fast. Agencies innovate to stay competitive and can experiment or pilot new programs to meet new rider needs. Fares remain stable.

Service is slower. Breakdowns in rail cars and buses or problems with aging signal equipment lead to unreliable service. Agencies can not modernize, innovate, or adapt to meet needs of new and changing markets.

ENVIRONMENTAL & SOCIETAL IMPACTS

Transit stays competitive. Ridership gains provide revenue that can be invested in busy routes as well as supporting services. Efficient transit modes and enhanced coordination between them contribute to greater regional livability, vitality, and competitiveness.

Transit is unable to stay competitive against personal autos and private services. Ridership drops and service is limited. Fewer transit options and less efficient modes reduce the region's livability, vitality, and competitiveness.





DELIVER VALUE ON OUR INVESTMENT

STRATEGIES TO DELIVER VALUE

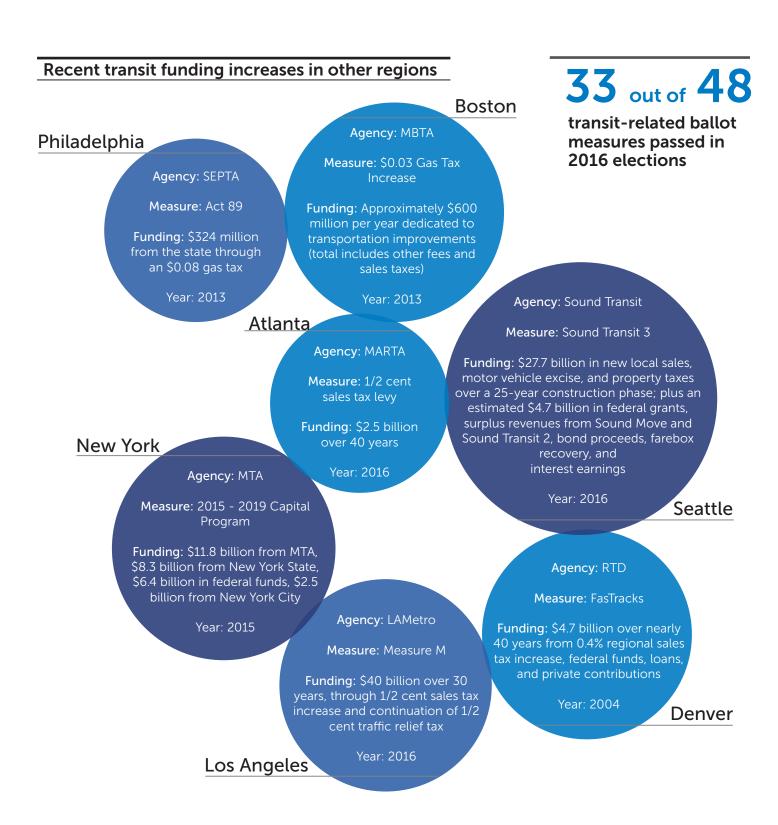
Transit infrastructure pays dividends to our region's vitality, economy, and resiliency. 12 A stable, dedicated annual capital investment program of \$2 to \$3 billion per year over the next 10 years is essential to meet the capital needs of the region and reduce the impact that disinvestment has on operations. If supported by a diversity of state, federal, and local funding commitments, it would empower agencies to improve the system's State of Good Repair and confidently move forward with priority projects detailed throughout this plan.

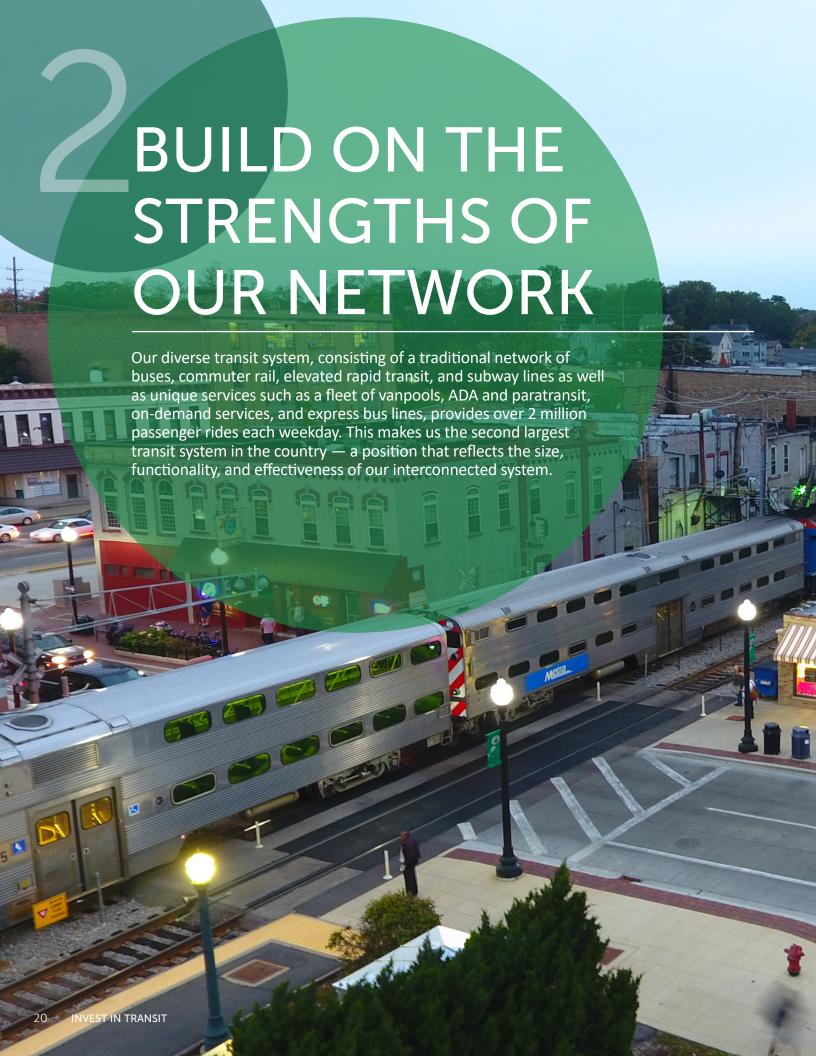
The agencies have a track record of delivering on large capital project commitments. RTA's Project Management Oversight office monitors the implementation of capital projects and found in its most recent report that 95% of state bondfunded projects were tracking ontime and 100% were on-budget notwithstanding delays related to state funding. The agencies are ready to deliver more improvement projects, but more funding is required to do that.

Over the next five years, the region's Transit Agencies will do as peer regions have done and take steps toward increasing funding.

The Transit Agencies will maximize our collective investment through the following strategies:

- Diversify and increase transit capital funding sources through state and local funding commitments of new revenue sources or expansions of existing revenues (e.g. gas tax). This strategy also includes advocating for pricing strategies that both fund transit and encourage transit ridership including congestion pricing, private mobility regulation, and parking.
- Set clear project priorities. Agencies will be specific and transparent about funding needs and usage of funds.
- Invite the Private Sector to share in transit investments. The
 agencies will continue to explore opportunities to embrace private
 investment in the transit system while maintaining the public
 interest. Activities could include small investments such as joint
 marketing, service subsidies, and maintenance partnerships.
 Activities also include continuing to explore the potential for
 public-private partnerships and more prevalent value capture
 mechanisms.
- Contribute to national economic strength and competitiveness through continued federal investment. The region will continue to seek federal funding and apply it to regionally and nationally significant projects.
- Provide a framework for the region to maximize the return on investment from the existing transit system by working with local municipalities and Chicago Metropolitan Agency for Planning (CMAP) to implement policies that support transit. This includes advocating for transit-supportive land uses, better pedestrian and bicycle access to transit services, more employment near transit, and higher density, infill development with accessible and affordable housing around transit. Initiatives like RTA's Community Planning Program provide resources for communities to leverage existing transit infrastructure and services.







BUILD ON THE STRENGTHS OF OUR NETWORK

THE PEOPLE AND EQUIPMENT BEHIND EVERY TRIP

The Transit Agencies meet the daily travel needs of hundreds of thousands of customers by offering a web of services ranging from long-haul bus and rail lines across the region to on-demand service to specific activity centers in local communities. Many people are unaware of the considerable team of dedicated employees it takes to operate this vast network, built on thousands of vehicle trips and millions of individual trips. Each rider notices whether his or her bus or train is on-time, clean, safe, comfortable, and affordable.

Achieving these service expectations for our customers requires a complicated operation of behind-the-scenes actions: the maintenance staff working in garages and yards to clean buses and trains and prepare them for service; technology staff overseeing systems that provide the real-time arrival information for buses and trains that is communicated to passengers; dispatchers in the control centers who monitor operations and respond to incidents: and bus and train operators that move the fleet to a carefully timed schedule. Agency funding is used not only to operate the service that riders see, but also to provide the tools and training necessary to maintain around-the-clock backend operations that make service possible.

We do it well, operating at \$0.61 per passenger mile, the lowest unit cost among national peers. ¹⁴ Our services also have a high customer satisfaction rating with 85% of riders satisfied with the service. ¹⁵

INVESTMENT IMPACTS RIDERSHIP

Despite our dedication and our performance, attracting and keeping riders is never a guarantee. Overall system ridership has been on the rise since the late 1990s, but has trended downward over the last five years. This development

O 85%

of riders satisfied with service

New capital investment and increased operating funding is needed to keep all of the equipment necessary for operations in constant working order.

is causing concern among the agencies and concern for riders and people living in the Chicago region. A loss of fare revenue makes it challenging for Transit Agencies to provide the same levels of service and also meet a mandated 50 percent fare recovery ratio.

We need to work with local municipalities to add housing and employment near the region's transit stations. We also need to continue to invest in our system – both to maintain the operations behind the scenes and the elements in plain sight – to keep everything working efficiently to operate a large, coordinated system that can deliver positive individualized rider experiences to the masses.

A day in the life of the transit system

A RIDER'S DAY

A rider uses the system at distinct times to access work, home, entertainment, and more.

SERVICE

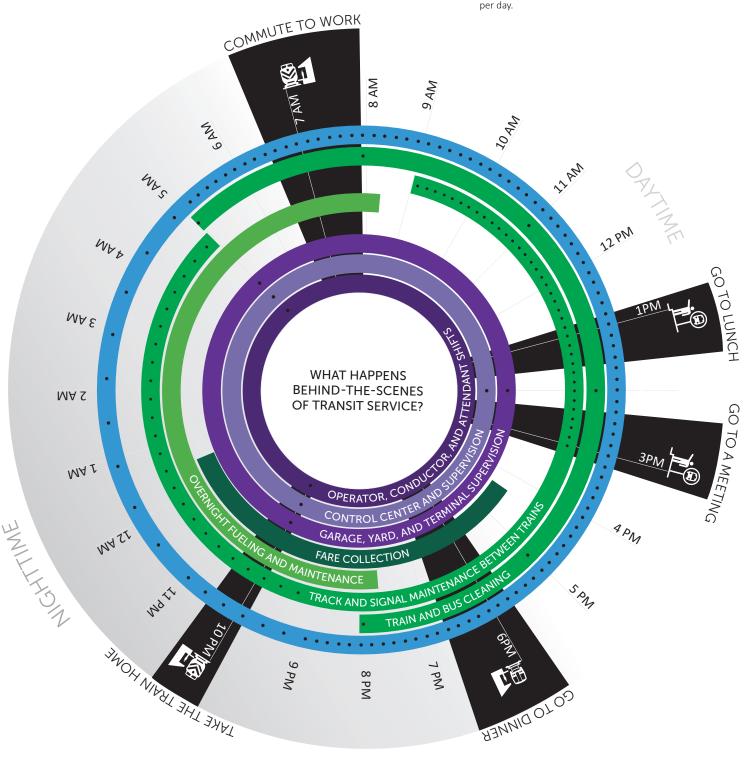
Most transit service runs from early morning to late evening, but many routes run continuously.

MAINTENANCE

Repairs, cleaning, track work, and more occur 24 hours a day, largely out of sight.

OPERATIONS

Operators, attendants, conductors, and control center crews hand over their duties multiple times per day.



BUILD ON THE STRENGTHS OF OUR NETWORK

SIX KEY TRANSIT MARKETS READY FOR INVESTMENT

The Chicago area transit system is a network of services that empowers people to move throughout the region, and investment in any part of the network benefits the whole. *Invest in Transit* focuses on key improvements in six areas that will build on the strengths of the transit system and address the challenges of the network to the benefit of riders throughout the region.







Suburban Cook County

TRANSIT STRENGTHS:

Growing population of transit riders

TRANSIT CHALLENGES:

Providing transit solutions to improve inter-suburban commutes; increasing transit-oriented development (TOD); ensuring coverage in demand response markets

- ✓ Pace Pulse Milwaukee Line design and construction
- ☑ Commercial and residential development completed following RTA TOD studies in Skokie and Orland Park
- → Support facilities for I-55 Bus on Shoulder Service.
- ➡ Design and land acquisition for Pace Northwest Cook Garage
- → Continuation of Pace posted stop and shelter programs
- → Pace Pulse Service on Dempster
- \$ CTA Forest Park branch reconstruction

TRANSIT STRENGTHS:

Metra commuter rail and Pace bus systems provide backbone for access

TRANSIT CHALLENGES:

Making practical first and last-mile connection to fixed route network

- ✓ New Pace express service on I-90
- ✓ RTA Pilot for reverse commute shuttle in Downers Grove to Esplanade business park
- → Parking and customer facilities to support Pace I-90 express service
- S Expansion of Pace Pulse routes, bus fleet expansion, and garage facilities
- § Partnerships between private mobility companies, municipalities, and employers to provide connectivity

Suburban Job Clusters

ADA Para

Chicago North Side

TRANSIT STRENGTHS: Frequent service and loyal ridership

TRANSIT CHALLENGES:

Crowded trains, buses stuck in traffic

TRANSIT STRENGTHS:

Moving thousands of people in and out of downtown

TRANSIT CHALLENGES:

Competition with cars for space on roads; difficult connections from the Central Business District to River

North and the West Loop

ROJECT

- ✓ Loop Link gives CTA buses exclusive lanes & signal priority
- ✓ New Washington and Wabash L Station
- ✓ New bus facility at Union Station
- □ Quincy L Station ADA access
- S Pace I-55 Express Bus service garage & fleet expansion
- S CTA Clinton Station Accessibility
- **S** CTA State/Lake station reconstruction
- S Union Station upgrade/development
- \$ Metra A-2 flyover, west of downtown

- ✓ CTA Wilson station reconstruction
 - ✓ CTA Your New Blue station improvements and added ADA accessibility
 - → Pace Bus On Shoulder operation on Edens Expressway
 - ☐ CTA Red Purple Modernization Phase One program
 ☐
 - → Metra replacement of UP-N Bridges
 - → CTA Blue Line Signal project
 - S CTA Red Purple Modernization Future Phases
 - \$ New Metra Station at Peterson on UP-N Line
 - New CTA Railcars
 - \$ CTA Blue Line track and traction power

Chicago Central Business District

atransit

TRANSIT STRENGTHS:

Providing demand-responsive transit service to eligible riders throughout region

TRANSIT CHALLENGES:

High trip costs for mandated service; no capital funding in 5-Year capital program

OJECTS

- ✓ New Call Center software and restructuring to reduce costs and improve response times
- S Vehicle purchase and garage construction for City of Chicago service to reduce operating costs

TRANSIT STRENGTHS:

Robust bus and train network

TRANSIT CHALLENGES:

Long travel times; lack of employment in the area; declining population

ROJECTS:

- ✓ Pace new express service to Amazon fulfillment centers in Joliet and Monee
- ✓ CTA Draft Environmental Impact Statement for Red Line South Extension
- ➡ Garfield Gateway & Cottage Grove station renovations
- ➡ Transit signal priority installation on connecting south suburban corridors
- S Final Engineering and construction of Red Line South Extension
- Metra 75th Street Corridor Improvement Project

Chicago South Side & Southland

BUILD ON THE STRENGTHS OF OUR NETWORK

STRATEGIES TO BUILD ON OUR STRENGTHS

Ongoing infrastructure and service improvements are needed to maintain the strong transit network that already exists in the region and provide a level of service that our customers expect. The Priority Project List on the following pages describes the key projects that the agencies would like to complete but cannot due to limited funding in the current capital program. A stable, dedicated annual capital investment program of \$2 to \$3 billion per year over the next 10 years is needed to provide adequate funding to deliver these projects.

\$30B of priority projects are not fully funded today

Over the next five years, the Transit Agencies will pursue the following strategies to build on our strengths:

- **Prioritize projects** in six key market areas identified in this plan for agency development and investment. The priority projects, as outlined in the *Priority Projects* chart, are the most impactful ways to build on our strengths.
- Influence roadway design standards and project delivery to ensure that transit and pedestrian treatments are considered as a part of every roadway project. This includes providing bus priority on roadway projects, including major reconstruction projects like the Eisenhower Expressway project but also smaller projects where pedestrian access to bus stops should be addressed.
- Seek innovative opportunities to improve the delivery of services for older adults and people with disabilities. This strategy may include modifying existing services or adding new types of service that connect low-income residents, people with disabilities, and a growing population of older adults to jobs and activities throughout the region.
- Facilitate seamless connections and physical integration of the three transit systems through coordinated schedules, regional maps, interagency wayfinding signage, and accessibility improvements.
- Evaluate travel needs and tailor services accordingly, including making judicious reductions on less-productive services in order to free funding for service improvements in areas with higher demand for transit.

The "Priority Projects" on the following pages are key initiatives that the Transit Agencies cannot complete at current capital funding levels and are advancing as additional capital funding is provided. The "10-Year Project Cost" for each Priority Project is the estimated cost of delivering the portion of the project realistically achievable in the next 10 years (2018 – 2027) and is subject to change. A portion of funding required to advance some of these Priority Projects is programmed in the Transit Agency capital programs, yet all are still under-funded or un-funded. See Invest in Transit Priority Projects and the RTA's most recent Operating Budget, 2-Year Financial Plan, 5-Year Capital Program for more detail.

CTA PRIORITY PROJECTS

Project Name	Description	10-year Project Cost
Replacement Bus Purchase	Ongoing need to replace buses as they age	\$618M
Life-Extending Bus Overhaul (1000 series)	Overhauls to maintain sufficient fleet until the first order of replacement buses is received	\$90M
Mid-Life Bus Overhaul (4300 series)	Overhauls to maintain vehicles, ensure reliability, and enable to perform through full useful life	\$35M
Railcar Purchase	Replacement of 2600- and 3200-series rail cars	\$1.6B
Railcar Overhaul (2600s and 5000s)	Quarter-life overhaul of 5000-series rail cars and life- extending overhauls of older 2600-series rail cars	\$525M
Red Line Extension*	Extension of the Red Line from 95th Street to 130th Street	\$2.3B
Red Purple Modernization**	Advancement of the Red and Purple Modernization (RPM) Program, the largest line rebuild and capital improvement project in CTA history	\$8.7B
Blue Line (O'Hare) Traction Power Capacity & Track Improvements	Upgrades and State of Good Repair projects along the O'Hare Branch of the Blue Line	\$300M
Blue Line (Congress Branch) Improvements***	First phase of reconstruction of Forest Park Branch of the Blue Line	\$454M
Green Line Improvements	Track, structural, station, and power improvements	\$454M
Red Line Improvements	Upgrades and State of Good Repair projects along the Red Line	\$224M
Brown Line Improvements	Upgrades and State of Good Repair projects along the Brown Line	\$223M
Systemwide Structural Renewal	State of Good Repair projects on CTA 'L' structure	\$250M
Rail Yard Improvements	Improvements to CTA Rail Yards	\$88M
Subway Life Safety Improvements	Upgrade to existing subway ventilation equipment	\$120M
Radio System Upgrade	Replacement of obsolete radio system	\$35M
Tactical Signal Improvements (Systemwide)	State of Good Repair projects and replacing obsolete equipment on CTA rail signal system	\$141M
Systemwide Station Program	Status upgrades, modernization, and accessibility improvements	\$600M
Future BRT/Bus Slow Zone Removal/ TSP/Dedicated Lane projects	Targeted street and traffic signal improvements to increase bus speeds	\$200M
Information Technology	Improvement of business processes and systems	\$170M
Non-Revenue Vehicle Replacement Program	Replacement of vehicles needed for maintenance and operations support	\$60M
Critical Needs at CTA Facilities	Roof and other upgrades to maintenance facilities	\$110M
Rail Shops Improvements	Provide repair and replacement to worn components at rail maintenance shops	\$191M
Bus Garage Improvements	Provide repairs at bus maintenance garages and shops	\$245M
New Training Center	New facility to instruct and train bus and rail operators	\$42M
New Control Center	Replace obsolete equipment at CTA's Control Center	\$150M
		Ć47.0D

Total \$17.9B

^{*}Ideally, 50% of this project cost would come from the federal New Starts program and the region would support the local match.

^{**} The total project costs includes all of the RPM Phase One costs (including \$2.1 billion of identified funds) plus a hypothetical next phase of RPM, the specific components of which have not been fully defined, that could occur within the 10 year timeframe. Ideally, 50% of this project cost would come from the federal Core Capacity program and the region would support the local match.

^{***} Trackwork is the first priority of the Forest Park Branch Reconstruction project (estimated at \$2.5 billion) and is included in the 10-Year Project Cost shown here. It is assumed the remainder of the project would occur outside the 10-year timeframe of this report.

METRA PRIORITY PROJECTS

Project Name	Description	10-year Project Cost
Fleet Modernization Plan	Replace and repair aging commuter rail cars and locomotives	\$2.1B
75th Street Corridor	Reconfigure track shared by Metra, Amtrak, and freight trains	\$1.5B
A-2 Interlocking Replacement	Separate tracks at busiest switching location on Metra system	\$500M
Bridge Replacement and Repair	Replace and repair 61 bridges systemwide	\$2.0B
Track Improvements	Replace and repair trackwork components	\$1.9B
Positive Train Control (PTC) - systemwide*	Install federally-mandated rail operational safety system	\$385M
Signal & Electrical Improvements	Replace and upgrade train control and grade crossing signals and systems	\$1.2B
Yards, Facilities, and Equipment Improvements	Modernize Metra's railcar and locomotive repair shops and yards	\$664M
Chicago Union Station Improvements	Implementation of key projects benefiting commuters using Chicago Union Station	\$500M
Rail Station Improvements	Rehabilitation and upgrades to station buildings, platforms, and parking lots	\$853M

Total \$11.6B

^{*}This project is currently fully funded in order to complete the federal mandate regarding Positive Train Control (PTC) implementation on a specific schedule. However, it is unclear at this time what the ongoing capital needs for this new system will be once it is implemented, so it is still included on the Priority Projects list.

PACE PRIORITY PROJECTS

Project Name	Description	10-year Project Cost
Fixed Route Buses - Replacement	Replacement of buses reaching useful life	\$177M
Fixed Route Buses - Expansion	Buses for new services	\$94M
Paratransit Vehicles - Replacement	Replacement of vehicles reaching useful life	\$57M
Paratransit Vehicles - Expansion	New Dial-a-Ride and ADA vehicles for aging population	\$13M
Community Vehicles - Replacement	Replacement of vehicles reaching useful life	\$20M
Community Vehicles - Expansion	New Community and Call-n-Ride vehicles	\$3M
Vanpool Vehicles - Replacement	Replacement of vans reaching useful life	\$51M
Associated Capital Maintenance Items	Capital costs associated with the maintenance of buses	\$28M
Regional Transit Signal Priority (RTSP)	Expand Transit Signal Priority installations region-wide	\$10M
Intelligent Bus System (IBS) Replacement	Equipment for bus tracking, communications, and data	\$11M
Farebox System	Replace fareboxes that are over 20-years old	\$21M
Improve Support Facilities	Improvements to garage facilities including underground storage tanks	\$79M
Construct New Support Facilities	Add needed capacity for bus maintenance and storage	\$69M
Security, Computer, Software, and Office Systems Upgrades	Upgrade systems to provide enhanced asset protection and business systems	\$52M
Support Equipment/Non-Revenue Vehicles	Facility and system maintenance equipment and vehicles	\$25M
Improve Passenger Facilities - Transportation Centers	Improvements to transportation and transfer facilities	\$26M
Improve Passenger Facilities - Park-n-Ride Lots	Updates and repairs to Park-n-Ride lots	\$7M
Pulse Infrastructure	Enhance Pulse service	\$51M
Pedestrian Infrastructure/Shelters/Signs	Shelters, pedestrian access, and completion of conversion to posted stops	\$33M
Bus on Shoulder (BoS) Facilities	Passenger facilities for Bus on Shoulder service	\$15M
ADA Regional Paratransit Program	Replacement of vehicles and radio systems for existing program. New vehicles, transfer locations, and maintenance facilities for direct Pace ownership of assets for ADA service within City of Chicago	\$193M

Total \$1.0B

STAY COMPETITIVE

Mobile devices, cultural trends toward shared mobility, and private mobility services are all disrupting traditional public transit paradigms. Transit agencies across the country are responding by adding enhanced trip planning, real-time availability, and mobile payment capabilities. These are small, but impactful improvements that change the customer experience. Transit's competitive advantage is its low cost, comfortable trips that allow riders to be productive en route, and fast service that is (or should be) largely removed from general traffic congestion. Continued investment is required to maintain that edge.



STAY COMPETITIVE

ADAPTATION IN A TIME OF CHANGE

Public transportation is no stranger to change. Suburbanization, the popularization of the private automobile, teleworking, gas prices, and the daily weather have shifted and swayed transit riders since the 1800s. That said. innovations in technology over the last ten years have quickly made an impact. The rapid proliferation of electronic sensors and data processing capability has provided new sources of information for improved operations. The invention of the smart phone and the overwhelming popularity of instant connectivity, information, and apps have changed rider expectations.

Regional demographics are also changing. Millennials, born between 1983 and 2000, are the nation's largest and least carfocused generation. ¹⁶ Many live in the City of Chicago, although research conducted for *Beginning the Discussion* showed that they are moving to the suburbs as well. The region is aging, with a seven percent increase in the population over 65, growing primarily in the City of Chicago and suburban counties. Both populations ride transit in the region and are

expected to continue doing so in the coming years, such that their expectations will shape change within the transit system. Work habits and commute patterns have also changed, with more people working from home and outside of historic office hours.

This era of change has introduced uncertainty for the future as mobility services come and go, and consumers constantly adjust to new options. The role of public and private sectors also could be changing as private mobility services resemble a public utility function to riders, but do not offer public equity protections against disparity of service due to income, physical abilities, and access to technology.

New mobility services are a double-edged sword. Earlier research indicated that they decreased car ownership but newer research suggests that this may not be the case.^{17 18} The mobility innovations could solve the challenge of providing transportation options in less dense suburban areas that are currently difficult and expensive to serve with traditional transit. However, if left unchecked, these innovations may encourage land use patterns that are not efficient for public transit in the long run. As private mobility services become more common in dense urban areas where transit service is strongest, it could cause a vicious cycle of decline in which fewer riders and more cars leads to slower bus speeds, less frequent service, and ridership losses. This devolution could ultimately result in more



congested streets and transit service cuts, any of which would be bad news for transit riders and our region as a whole.

The task ahead for the Transit Agencies is balancing the risks and potential negative impacts of change with the potential to improve mobility and transit service in the future.

ADAPTATION IN A COMPETITIVE MARKET

Staying competitive in this environment requires constant innovation and improvement. To stay competitive means to provide a desirable alternative to driving alone, as most regional residents still drive their cars for most daily trips. 19 It includes investment in infrastructure, including new rail, bus priority treatments on roadways, and better pedestrian infrastructure. It also includes making changes that the Transit Agencies have already made or are working to make: improving the customer experience through real-time information and trip planning information; increasing speeds by dedicating right of way to bus routes and enforcing curb space dedicated to bus stop loading; adding service to reduce crowding on busy routes; and delivering more seamless

Transit service is still the most efficient way to move large numbers of people. transfers between transit modes.

Of course, all of these innovations and services have a cost associated with them. In an era where limited operating and capital funding is already dedicated to much-needed system repairs and existing operations, it is difficult for Transit Agencies to carve out budgets to make enhancements.

80% of those surveyed are satisfied with the speed and reliability of their transit trips.²⁰

TRANSIT IS AS RELEVANT AS EVER

Transit has many inherent advantages that make it worthy of continued investment in today's market. Public transit has lower out-of-pocket costs than car ownership.21 Transit fares are also predictably consistent and low compared to new mobility options that are priced based on a continually updated computation of time, distance, and demand. Public transit also gives riders the opportunity to use travel time productively instead of focusing on the road. Transit is faster and more predictable than driving in many corridors.



STAY COMPETITIVE

TRANSIT IS THE CORE OF MOBILITY

Transit services are the region's most equitable, affordable means of mass mobility available. They span the region and are already tailored to meet the needs and built-environment of each community. Private mobility companies (such as Uber, Lyft, Via, Chariot, and taxicabs) now also operate in many of the same areas. They offer transportation options that some people find appealing and convenient, but do not replace public transit or offer all of the same benefits. Transit Agencies will continue to make investments in successful transit, while also exploring partnerships in areas where transit is less effective or very expensive to operate.

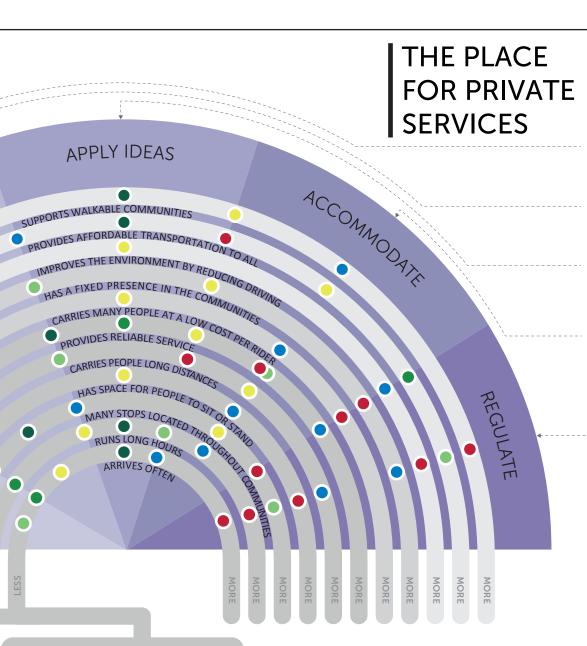
TRANSIT INVESTMENT PROVIDES...

SOCIETAL BENEFITS

Transit has a positive impact on our region. It supports walkable communities, provides affordable and accessible transportation to all, and improves the environment by reducing driving. The Transit Agencies will work with communities to take advantage of these benefits. In areas where private mobility services slow transit vehicles down or encourage unnecessary driving, communities will benefit from regulating them. In areas where private mobility services help fill a mobility gap, partnerships make sense.

OPERATIONAL EFFICIENCIES

Transit is an efficient way to move many people at once. Rail lines and busy bus routes have a fixed presence in the communities and carry many people at a low cost per rider. The Transit Agencies will continues to invest in rail infrastructure and key bus corridors to meet existing needs, then look to private mobility partnerships in areas where transit is expensive, impractical, or unproven.



Public transit can benefit from private mobility services in some areas and be harmed by it in others. With that in mind, transit agencies will consider the following actions:

CONTRACTING with new mobility providers to run service and improve efficiency

PARTNERING with new mobility providers to offer services that fill gaps in transit services

APPLYING IDEAS like software innovations and routing techniques used by the private sector to solidify strong transit markets

ACCOMMODATING new mobility providers by providing space to load/unload at suburban rail stations

REGULATING mobility companies to prevent them from picking up/ dropping off or transporting customers in such a way that it degrades transit services

PASSENGER CONVENIENCES

Transit at its best provides reliable service, carries people long distances, has space for people to sit or stand, provides nearby stops throughout communities, operates long hours, and comes frequently. The most robust transit services are successful in higher density areas like downtown Chicago and suburban downtowns. The agencies will continue to fund (and protect) transit services in these areas while looking to partner with private companies in areas that do not have high demand for transit service.

TRANSIT SERVICES AT THE CORE IN OUR REGION

- PACE CALL-N-RIDES, VANPOOL
- PACE DIAL-A-RIDES
- PACE ADA PARATRANSIT
- PACE NEIGHBORHOOD CONNECTORS
- CTA BUS & RAIL, PACE CTA CONNECTORS
- METRA COMMUTER RAIL, PACE EXPRESS

STAY COMPETITIVE

STRATEGIES TO STAY COMPETITIVE

Policies developed and actions taken over the next five years by the Transit Agencies will move toward the promise of new technologies while also providing protections against potential adverse effects.

A stable, dedicated annual capital investment program of \$2 to \$3 billion per year over the next 10 years will empower the Transit Agencies to modernize our transit system to maximize its competitiveness.

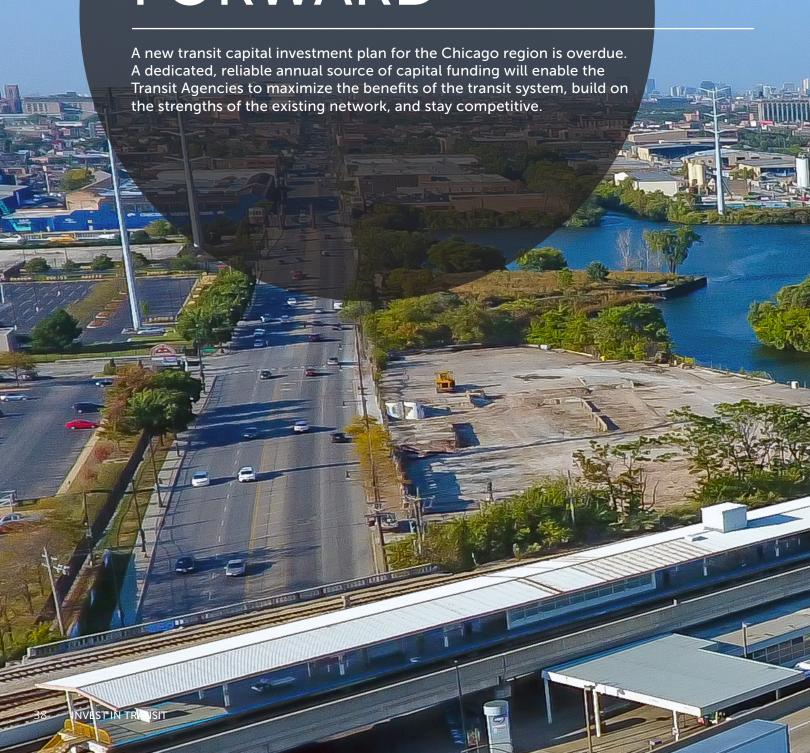
Practically speaking, being competitive means maintaining and improving the access at the ends of a Metra trip, providing dedicated curb space for first- and last-mile mobility services at suburban stations, and speeding service on connecting CTA routes through the Chicago Central Business District. It also means continuing to make improvements in real-time information for Pace buses and testing new on-demand service delivery models for Call-n-Ride to provide a balance of coverage and availability in lower density areas.

Policies developed and actions taken over the next five years by the Transit Agencies will move toward the promise of new technologies. The following strategies will help our system adapt to the needs of existing and future customers by building on transit's key strengths:

- Improve systemwide bus speed and reliability. This includes work with local road agencies to secure dedicated bus lanes, transit priority treatments (queue jumps, Transit Signal Priority, level boarding, etc.), and support for enforcement, to make all bus services faster.
- Advance premium bus priority corridors throughout the region (such as Pace Express Bus and Bus-on-Shoulder). It also includes advocating for high-capacity bus transit to be included, and given priority, as a part of roadway and highway projects (such as North Lake Shore Drive redesign).
- Invest in technology to improve bus and rail reliability and performance. This will include replacing Metra's current train tracking system with an Automated Communication Onboard Reporting Network (ACORN) system. It could also include purchasing more dynamic routing software for Pace Call-n-Rides to serve less dense areas.
- Pursue regulation of private mobility services where high volume transit is successful and practical in order to level the playing field, protect public access interests, collect revenue, and ensure that private services do not impede transit movement.
- Invest in continued Ventra mobile app development and integration with other services such as Divvy so that it empowers seamless use of transit modes and approaches the convenience and customer experience of Mobility-as-a-Service applications.
- Conduct research, policy analysis, and pilots to prepare the transit system for future technologies such as autonomous vehicle operation.
- Collect and share more transit-related data. Conduct surveys and continually improve and archive real-time transit data to create a valuable resource for future research and performance measurement over time.
- Make small improvements that add amenities for passengers and market them alongside transit's key strengths. Relatively simple capital investments like station lights and warming lamps can make a difference.









Transit capital investment makes sense for the transit system, the economy, and the region.

Now is the time to act.

Capital investment, along with stabilized operating funding, will empower the Transit Agencies to build upon the strengths of a robust legacy system with modern, relevant improvements that provide better experiences in the short term and promote greater quality of life in the long term. Actions taken by the Transit Agencies over the five year plan timeline will provide visible improvements to riders of the system and also set a course for down-the-road investments as transportation shifts continue to take shape.

In 2018, the Transit Agencies will continue to deliver safe, reliable,

and convenient public transit for Northeastern Illinois. In addition, the agencies will launch a capital funding campaign to increase the level of capital investment to \$2 to \$3 billion annually as described throughout this plan.

Additional funding will provide the means for the Transit Agencies to improve the system and pursue the strategies outlined in *Invest in Transit*. We will also continue to report regularly on transit funding, system performance, ridership, safety, and customer satisfaction to ensure stakeholders are aware of the opportunities ahead and the benefits of investing in transit.





REFERENCES

- "The New Real Estate Mantra: Location Near Public Transportation." http://www. apta.com/resources/statistics/Documents/ NewRealEstateMantra.pdf
- "Land closest to Chicago's El stations most valuable in Chicago." http://www. metroplanning.org/news/7129/Land-closest-to-Chicagos-El-stations-most-valuable-in-Chicago
- 3. RTA 2016 Regional Report Card
- 4. "Metra announces \$2.4 billion modernization plan." https://metrarail.com/about-metra/newsroom/metra-announces-24-billion-modernization-plan
- 5. "City Council backs TIF to snare millions of dollars for Red-Purple line work." http://www.chicagotribune.com/news/local/politics/ct-chicago-city-council-meeting-met-1130-20161130-story.html
- 6. "Smart road tech, Pace buses come to highway in Northwest suburbs." http://wgntv. com/2017/09/05/smart-road-tech-pace-buses-come-to-highway-in-northwest-suburbs/
- 7. "RTA Bridging the Gap." http://www.rtachicago. org/files/documents/businessandfinance/ capitalassetconditionassessment/2017%20 Capital%20Investment%20Bridge%20the%20 Gap.pdf
- 8. National Transit Database. https://www.transit.dot.gov/ntd/ntd-data
- 9. "Washington Metro, 40 and Creaking, Stares at a Midlife Crisis." https://www.nytimes. com/2016/04/04/us/washington-metro-40-and-creaking-stares-at-a-midlife-crisis.html
- 10. "Cuomo Declares a State of Emergency for New York City Subways." https://www.nytimes. com/2017/06/29/nyregion/cuomo-declares-astate-of-emergency-for-the-subway.html
- 11. Congestion Mitigation and Air Quality Improvement (CMAQ) Program is a federally-funded program of surface transportation improvements designed to improve air quality and mitigate congestion.

- 12. "Chicago Metropolis 2020's Time is Money: The Economic Benefits of Transit Investment." https://www.edrgroup.com/ pdf/timeismoney.pdf
- 13. "RTA Report on Project Management Oversight, June 2017." http://www. rtachicago.org/files/documents/ businessandfinance/FIN062217-3b-Reporton-Project-Management-Oversight.pdf
- 14. "Regional Transit Strategic Plan: Beginning the Discussion." http://www.rtachicago. org/files/documents/strategicprograms/strategicplan/Headlines-Book_Online_FINAL.pdf
- 15. "RTA 2016 Customer Satisfaction Survey." http://www.rtachicago.org/index.php/plansprograms/performance-measures/2016customer-satisfaction-survey.html
- "Millennials in Motion." https://uspirg.org/ sites/pirg/files/reports/Millennials%20 in%20Motion%20USPIRG.pdf
- 17. "Shared Mobility and the Transformation of Public Transit." https://www.apta.com/resources/reportsandpublications/Documents/APTA-Shared-Mobility.pdf
- 18. "Disruptive Transportation: The Adoption, Utilization, and Impacts of Ride-Hailing in the United States." https://itspubs.ucdavis.edu/wp-content/themes/ucdavis/pubs/download_pdf.php?id=2752
- 19. "CMAP Travel Trends." https://datahub. cmap.illinois.gov/dataset/e3b1e33aa927-45a8-9a3d-d43de118f74a/ resource/87549577-0e21-48ad-958ecd66b1dd955a/download/FY17-0012-TRAVEL-TRENDS-SNAPSHOT.pdf
- 20. "RTA 2016 Customer Satisfaction Survey." http://www.rtachicago.org/index.php/plansprograms/performance-measures/2016customer-satisfaction-survey.html
- 21. "APTA 2017 September Transit Savings Report." www.apta.com/mediacenter/ pressreleases/2017/Pages/September-Transit-Savings-Report-.aspx

The 2018-2023 Regional Transit Strategic Plan, *Invest in Transit*, is the region's case for pursuing dependable funding streams that will enable the Transit Agencies to provide vital services for Northeastern Illinois into the future.

For more information please see *Beginning the Discussion*, which describes key findings from research conducted in 2016 as preparation for the 2018-2023 Regional Transit Strategic Plan, and *Invest in Transit Priority Projects*, which provide more detail on the key projects that the Transit Agencies would like to complete with a stable, dedicated capital investment program.







